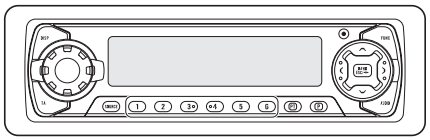
Service Manual

KEH-P6900R/X1N/EW



ORDER NO.
CRT2429

MULTI-CD CONTROL HIGH POWER CASSETTE PLAYER WITH RDS TUNER

KEH-P6900R X1N/EW
KEH-P6900R-B X1N/EW
KEH-P6910R X1N/EE

● This service manual should be used together with the following manual(s):

Model No.	Order No.	Mech. Module	Remarks
CX-1011	CRT2406	3L	Cassette Mech. Module:Mech.Description, Disassembly, Adjustment

NOTE:

● **Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.**

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PIONEER ELECTRONIC [EUROPE] N.V. Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE.LTD. 253 Alexandra Road, #04-01, Singapore 159936

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K-ZZS. NOV. 1999 Printed in Japan

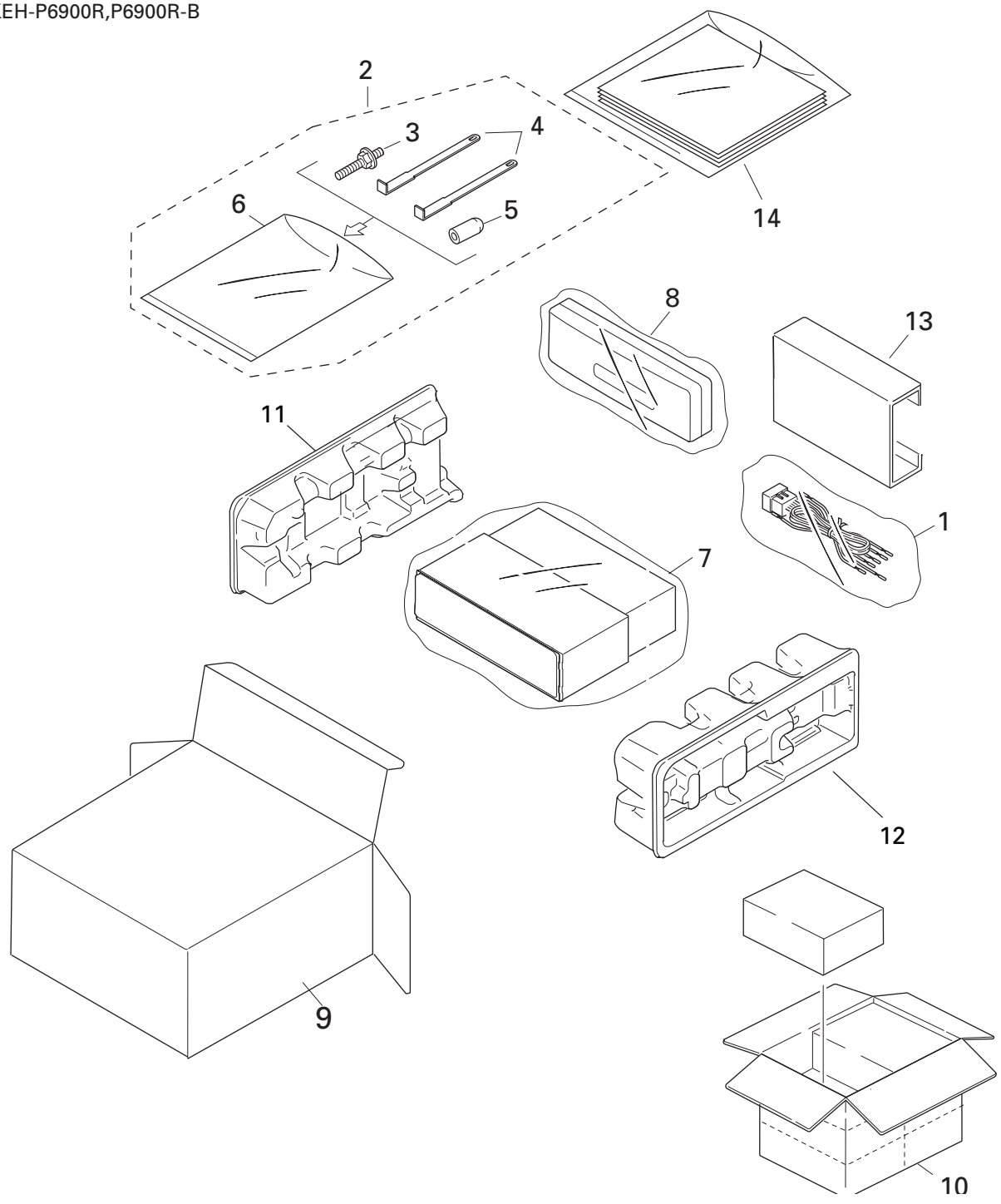
1. SAFETY INFORMATION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer.
Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty.
If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

2. EXPLODED VIEWS AND PARTS LIST

2.1 PACKING

● KEH-P6900R,P6900R-B



NOTE:

● Parts marked by "*" are generally unavailable because they are not in our Master Spare Parts List.

● Screws adjacent to ∇ mark on the product are used for disassembly.

(1) PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Cord Assy	CDE6118
	2	Accessory Assy	CEA1917
	3	Screw	CBA1304
	4	Handle	CNC5395
	5	Bush	CNV3930
*	6	Polyethylene Bag	E36-615
	7	Polyethylene Bag	CEG-162
	8	Case Assy	CXB3520
	9	Carton	See Contrast table(2)
	10	Contain Box	See Contrast table(2)
	11	Protector	CHP2251
	12	Protector	CHP2252
	13	Inner Box	CHW1754
	14-1	Owner's Manual	CRD3106
	14-2	Owner's Manual	CRD3107
	14-3	Owner's Manual	CRD3108
	14-4	Installation Manual	CRD3109
*	14-5	Passport	CRY1013
*	14-6	Warranty Card	CRY1157
	14-7	Polyethylene Bag	CEG1116

(2) CONTRAST TABLE

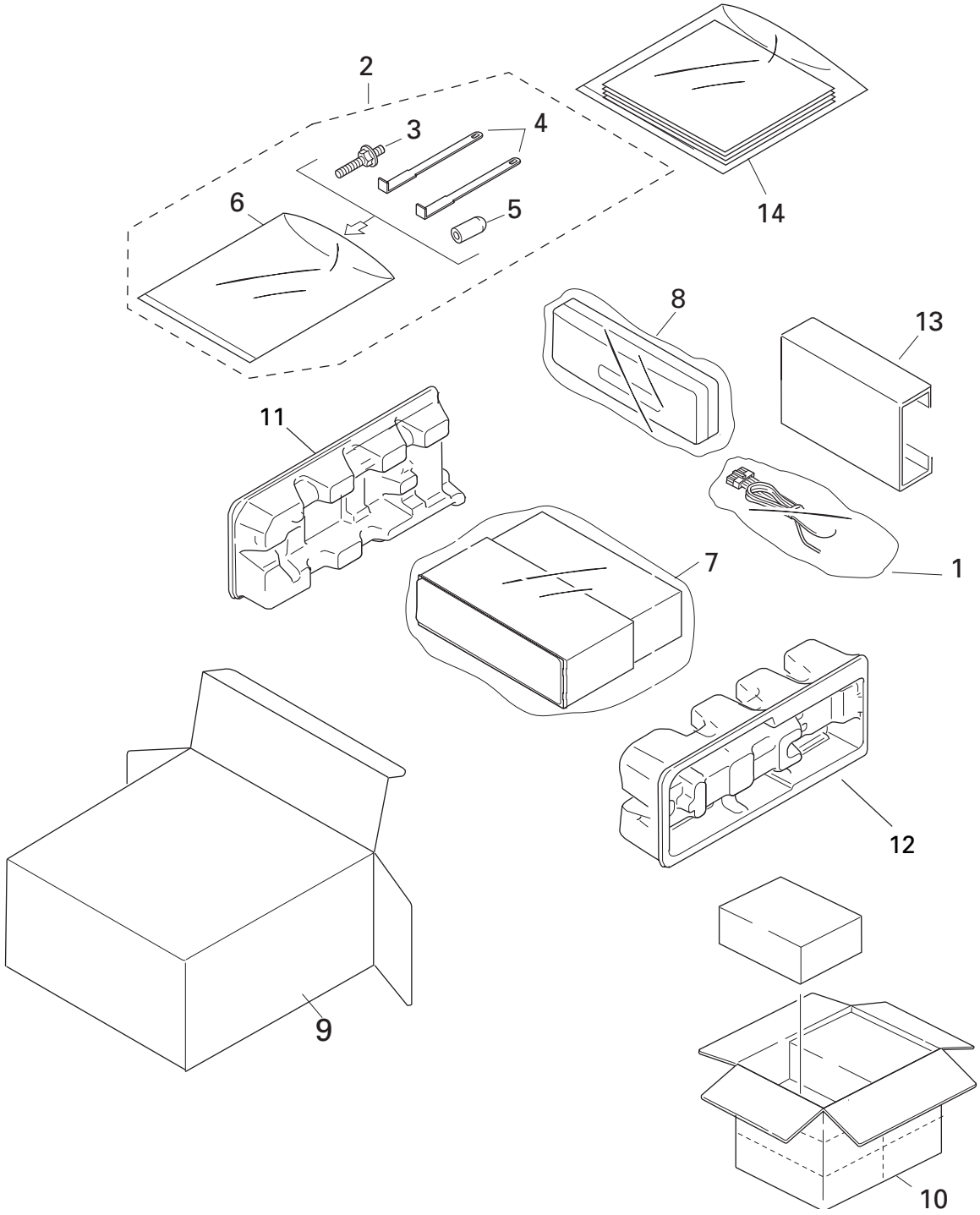
KEH-P6900R/X1N/EW and KEH-P6900R-B/X1N/EW are constructed the same except for the following:

Mark No.	Symbol and Description	Part No.	
		KEH-P6900R/X1N/EW	KEH-P6900R-B/X1N/EW
9	Carton	CHG3942	CHG3946
10	Contain Box	CHL3942	CHL3946

● **Owner's Manual, Installation Manual**

Model	Part No.	Language
KEH-P6900R/X1N/EW KEH-P6900R-B/X1N/EW	CRD3106	English, Spanish
	CRD3107	French, German
	CRD3108	Italian, Dutch
	CRD3109	English, French, German, Spanish, Italian, Dutch

● KEH-P6910R



● PACKING SECTION PARTS LIST

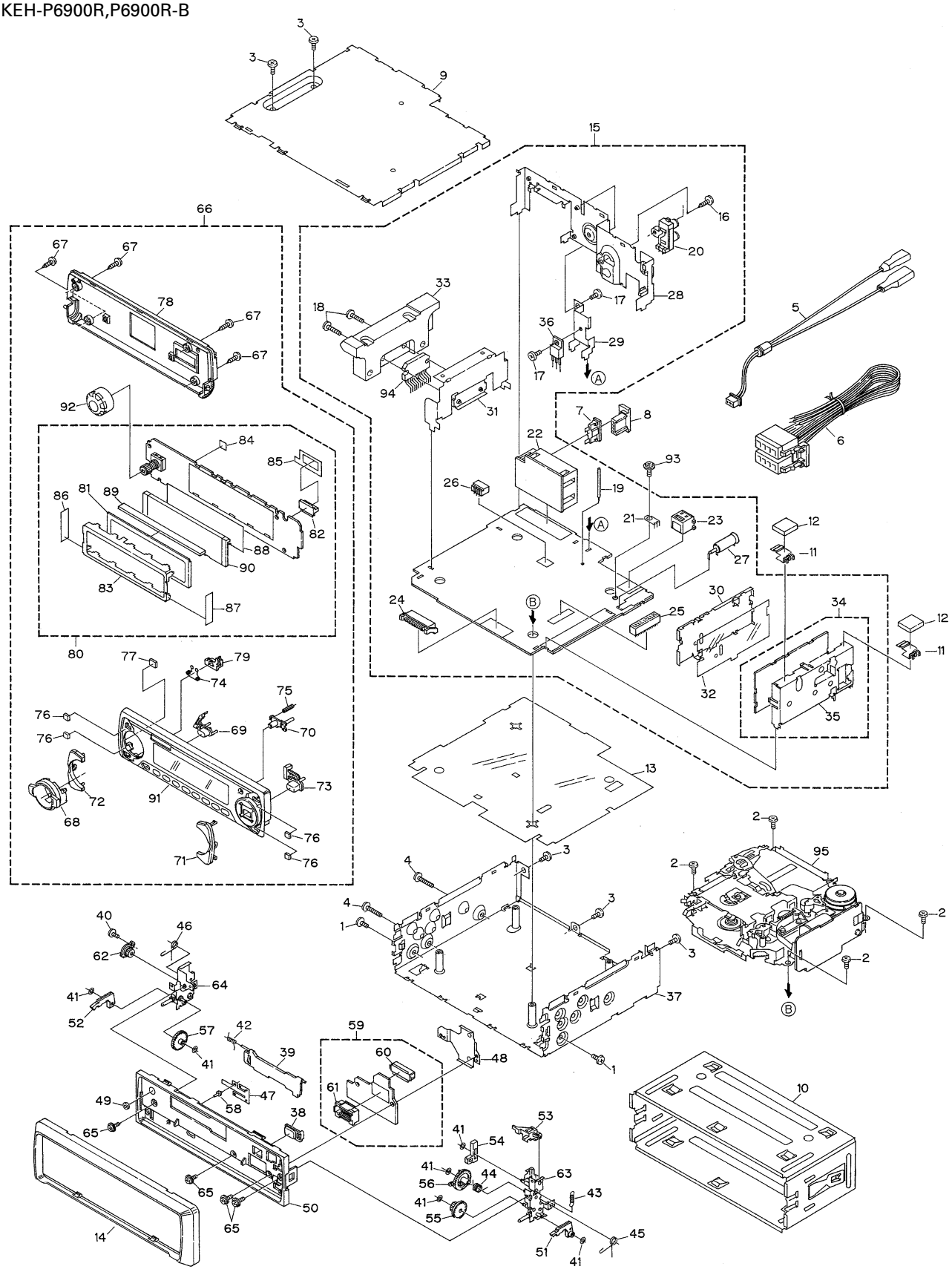
Mark	No.	Description	Part No.
	1	Cord Assy	CDE6120
	2	Accessory Assy	CEA1917
	3	Screw	CBA1304
	4	Handle	CNC5395
	5	Bush	CNV3930
*	6	Polyethylene Bag	E36-615
	7	Polyethylene Bag	CEG-162
	8	Case Assy	CXB3520
	9	Carton	CHG3943
	10	Contain Box	CHL3943
	11	Protector	CHP2251
	12	Protector	CHP2252
	13	Inner Box	CHW1754
	14-1	Owner's Manual	CRD3115
	14-2	Installation Manual	CRD3116
*	14-3	Warranty Card	CRY1157
	14-4	Polyethylene Bag	CEG1116

● Owner's Manual, Installation Manual

Model	Part No.	Language
KEH-P6910R/X1N/EE	CRD3115	English, Russian
	CRD3116	English, Russian

2.2 EXTERIOR

● KEH-P6900R,P6900R-B



(1) EXTERIOR SECTION PARTS LIST

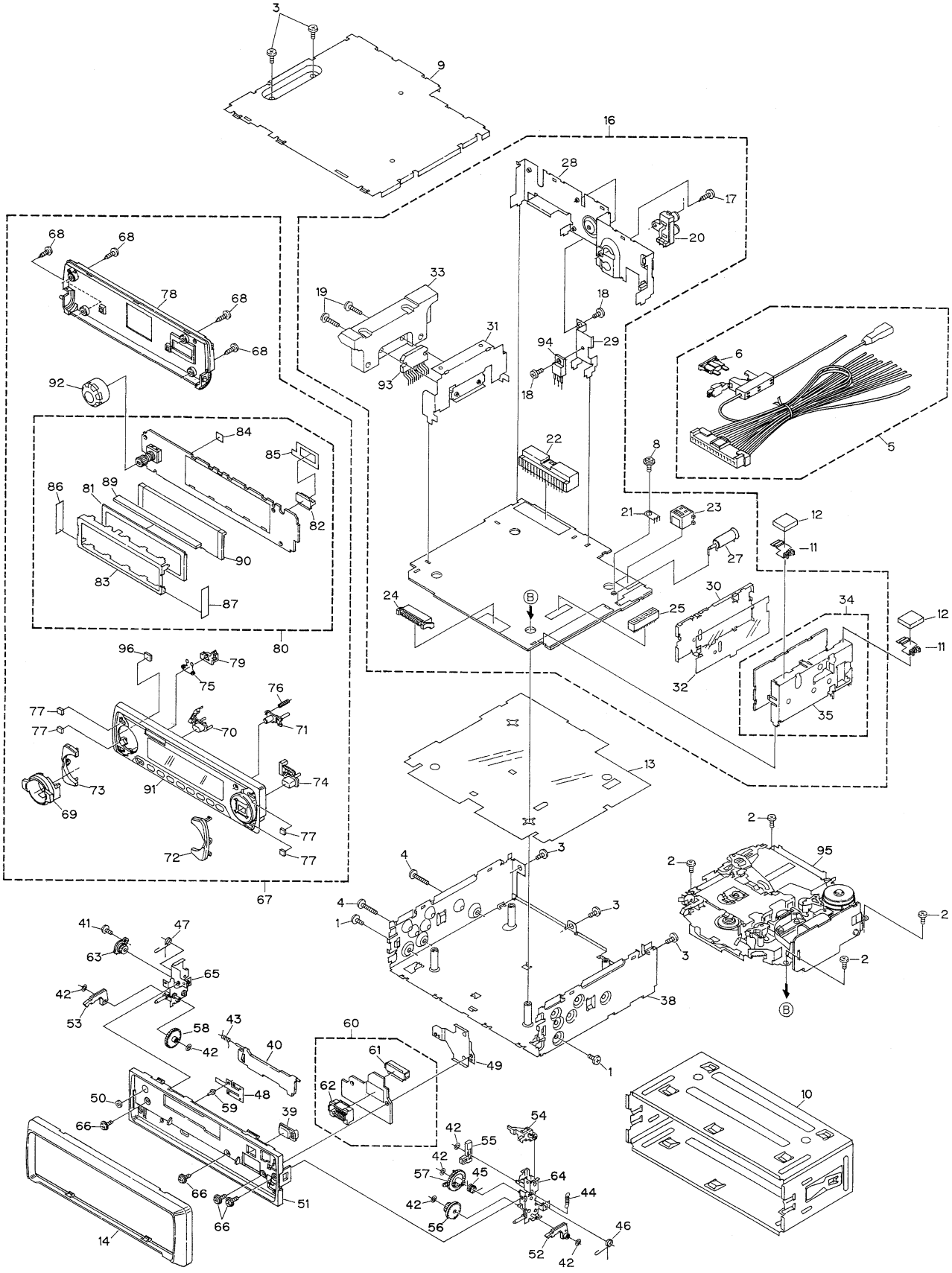
Mark No.	Description	Part No.
1	Screw	BMZ30P040FZK
2	Screw	BSZ26P050FMC
3	Screw	BSZ30P050FMC
4	Screw	BSZ30P200FMC
5	Cord	CDE5801
6	Cord Assy	CDE6118
7	Fuse(10A)	CEK1136
8	Plug	CKM1314
9	Case	CNB2350
10	Holder	CNC6798
11	Holder	CNC8357
12	Spacer	CNM4913
13	Insulator	CNM6530
14	Panel	CNS5992
15	Tuner Amp Unit	See Contrast table(2)
16	Screw	BPZ26P060FMC
17	Screw	BSZ26P060FMC
18	Screw	BSZ26P160FMC
19	Clamper	CEF1005
20	Pin Jack(CN301)	CKB1028
21	Terminal(CN403)	CKF1059
22	Plug(CN952)	CKM1288
23	Connector(CN751)	CKS3408
24	Plug(CN601)	CKS3537
25	Connector(CN602)	CKS3568
26	Connector(CN603)	CKS3597
27	Antenna Jack(CN401)	CKX1056
28	Panel	CNB2356
29	Holder	CNC6845
30	Holder	CNC7533
31	Holder	CNC7996
32	Insulator	CNM5967
33	Heat Sink	CNR1505
34	FM/AM Tuner Unit	CWE1500
35	Holder	CNC7532
36	Transistor(Q951)	2SD2396
37	Chassis Unit	See Contrast table(2)
38	Button(EJECT)	CAC6327
39	Door	CAT2109
40	Screw(M2x2)	CBA1176
41	Washer	CBF1038
42	Spring	CBH1838
43	Spring	CBH2310
44	Spring	CBH2311
45	Spring	CBH2312
46	Spring	CBH2313
47	Spring	CBL1492
48	Holder	CNC8560
49	Cushion	CNM5486
50	Panel	CNS5728
51	Arm	CNV5991
52	Arm	CNV5992
53	Arm	CNV5993
54	Lever	CNV5994
55	Gear	CNV5995
56	Gear	CNV5996
57	Gear	CNV5997
58	Pin	CNV6027
59	Panel PCB Unit	CWM6720
60	Socket(CN605)	CKS3550
61	Connector(CN604)	CKS4206
62	Damper Unit	CXB5070
63	Holder Unit	CXB5736
64	Holder Unit	CXB5737
65	Screw	IMS20P045FZK
66	Detach Grille Assy	See Contrast table(2)
67	Screw	BPZ20P100FZK
68	Knob	CAA1525
69	Button(SOURCE)	CAC6331
70	Button(OPEN)	CAC6333
71	Button(FUNC,AUDIO)	CAC6337
72	Button(DISP,TA)	CAC6339
73	Button(BAND)	CAC6343
74	Spring	CBH2316
75	Spring	CBH2320
76	Cushion	CNM6542
77	Spacer	CNM6808
78	Cover	CNS5737
79	Holder	CNV6177
80	Keyboard Unit	See Contrast table(2)
81	LCD(LCD901)	See Contrast table(2)
82	Connector(CN901)	CKS4205
83	Holder	CNC8562
84	Spacer	CNM6710
85	Spacer	CNM6711
86	Spacer	CNM6733
87	Spacer	CNM6734
88	Sheet	See Contrast table(2)
89	Connector	CNV5990
90	Lighting Conductor	CNV6001
91	Grille Unit	See Contrast table(2)
92	Knob Unit(VOL)	CXB5350
93	Screw	ISS26P055FUC
94	IC(IC301)	PAL005A
95	Cassette Mechanism Module	EXK4015

(2) CONTRAST TABLE

KEH-P6900R/X1N/EW and KEH-P6900R-B/X1N/EW are constructed the same except for the following:

Mark No.	Symbol and Description	Part No.	
		KEH-P6900R/X1N/EW	KEH-P6900R-B/X1N/EW
15	Tuner Amp Unit	CWM6704	CWM6705
37	Chassis Unit	CXB4684	CXB4828
66	Detach Grille Assy	CXB5352	CXB5353
80	Keyboard Unit	CWM6714	CWM6715
81	LCD(LCD901)	CAW1566	CAW1596
88	Sheet	Not used	CNM6796
91	Grille Unit	CXB5342	CXB5343

● KEH-P6910R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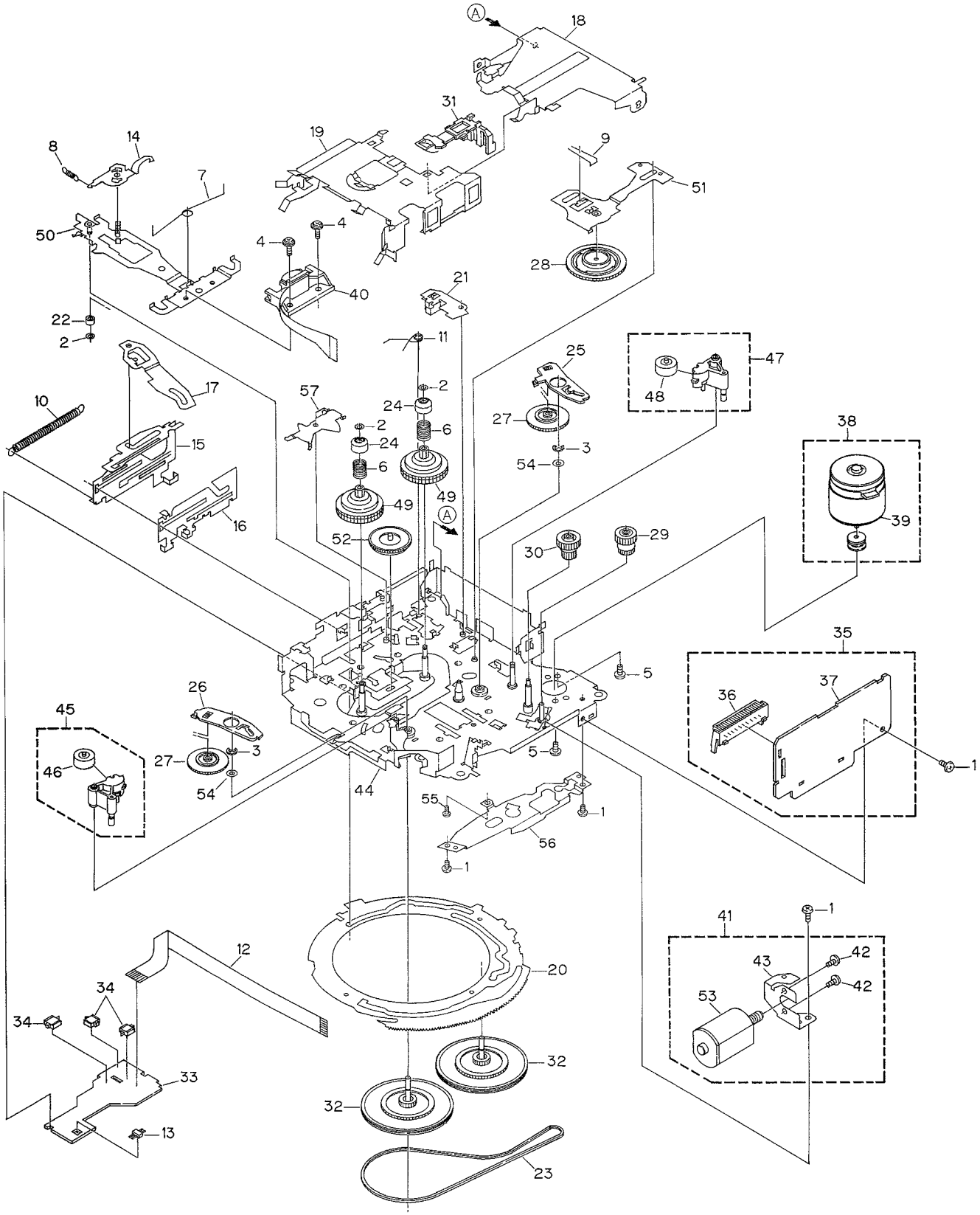
● EXTERIOR SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Screw	BMZ30P040FZK
	2	Screw	BSZ26P050FMC
	3	Screw	BSZ30P050FMC
	4	Screw	BSZ30P200FMC
	5	Cord Assy	CDE6120
	6	Fuse(10A)	CEK1136
	7	•••••	
	8	Screw	ISS26P055FUC
	9	Case	CNB2350
	10	Holder	CNC6798
	11	Holder	CNC8357
	12	Spacer	CNM4913
	13	Insulator	CNM6530
	14	Panel	CNS5992
	15	•••••	
	16	Tuner Amp Unit	CWM6706
	17	Screw	BPZ26P060FMC
	18	Screw	BSZ26P060FMC
	19	Screw	BSZ26P160FMC
	20	Pin Jack(CN301)	CKB1028
	21	Terminal(CN403)	CKF1059
	22	Plug(CN951)	CKM1231
	23	Connector(CN751)	CKS3408
	24	Plug(CN601)	CKS3537
	25	Connector(CN602)	CKS3568
	26	•••••	
	27	Antenna Jack(CN401)	CKX1056
	28	Panel	CNB2360
	29	Holder	CNC6845
	30	Holder	CNC7533
	31	Holder	CNC7996
	32	Insulator	CNM5967
	33	Heat Sink	CNR1505
	34	FM/AM Tuner Unit	CWE1504
	35	Holder	CNC7532
	36	•••••	
	37	•••••	
	38	Chassis Unit	CXB4693
	39	Button(EJECT)	CAC6327
	40	Door	CAT2109
	41	Screw(M2x2)	CBA1176
	42	Washer	CBF1038
	43	Spring	CBH1838
	44	Spring	CBH2310
	45	Spring	CBH2311
	46	Spring	CBH2312
	47	Spring	CBH2313
	48	Spring	CBL1492
	49	Holder	CNC8560
	50	Cushion	CNM5486
	51	Panel	CNS5728
	52	Arm	CNV5991
	53	Arm	CNV5992
	54	Arm	CNV5993
	55	Lever	CNV5994
	56	Gear	CNV5995
	57	Gear	CNV5996
	58	Gear	CNV5997
	59	Pin	CNV6027
	60	Panel PCB Unit	CWM6720
	61	Socket(CN605)	CKS3550
	62	Connector(CN604)	CKS4206
	63	Damper Unit	CXB5070
	64	Holder Unit	CXB5736
	65	Holder Unit	CXB5737
	66	Screw	IMS20P045FZK
	67	Detach Grille Assy	CXB5355
	68	Screw	BPZ20P100FZK
	69	Knob(EQ)	CAA1525
	70	Button(SOURCE)	CAC6331
	71	Button(OPEN)	CAC6333
	72	Button(FUNC,AUDIO)	CAC6337
	73	Button(DISP,TA)	CAC6339
	74	Button(BAND)	CAC6343
	75	Spring	CBH2316
	76	Spring	CBH2320
	77	Cushion	CNM6542
	78	Cover	CNS5737
	79	Holder	CNV6177
	80	Keyboard Unit	CWM6715
	81	LCD(LCD901)	CAW1596
	82	Connector(CN901)	CKS4205
	83	Holder	CNC8562
	84	Spacer	CNM6710
	85	Spacer	CNM6711
	86	Spacer	CNM6733
	87	Spacer	CNM6734
	88	•••••	
	89	Connector	CNV5990
	90	Lighting Conductor	CNV6001
	91	Grille Unit	CXB5345
	92	Knob Unit(VOL)	CXB5350
	93	IC(IC301)	PAL005A
	94	Transistor(Q951)	2SD2396
	95	Cassette Mechanism Module	EXK4015
	96	Spacer	CNM6808

2.3 CASSETTE MECHANISM MODULE



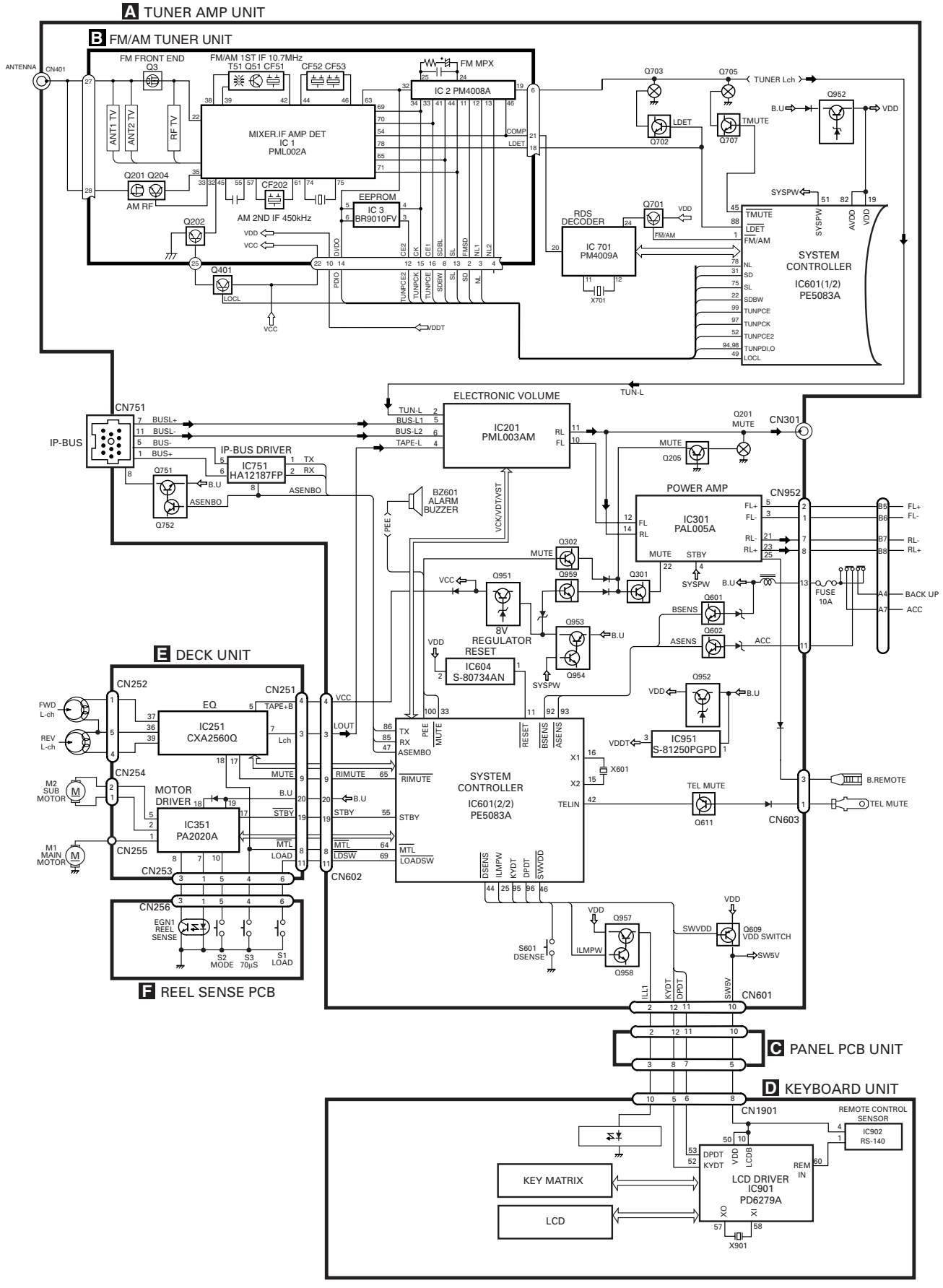
● CASSETTE MECHANISM MODULE SECTION PARTS LIST

Mark No.	Description	Part No.
1	Screw	BSZ20P040FMC
2	Washer	CBF1037
3	Washer	CBG1003
4	Screw	EBA1028
5	Screw	CBA1037
6	Spring	EBH1531
7	Spring	EBH1624
8	Spring	EBH1625
9	Spring	EBH1626
10	Spring	EBH1627
11	Spring	EBH1629
12	Cord	EDD1024
13	Photo-reflector(EGN1)	EGN1004
14	Arm	ENC1526
15	Lever	ENC1530
16	Lever	ENC1531
17	Arm	ENC1532
18	Frame	ENC1533
19	Holder	ENC1534
20	Gear	ENC1535
21	Arm	ENC1536
22	Roller	ENR1040
23	Belt	ENT1027
24	Collar	ENV1508
25	Arm	ENV1539
26	Arm	ENV1540
27	Gear	ENV1544
28	Gear	ENV1547
29	Gear	ENV1548
30	Worm Wheel	ENV1550
31	Lever	ENV1551
32	Flywheel	ENV1554
33	Gathering PCB	ENX1054
34	Switch(S1,S2,S3)	ESG1007
35	Deck Unit	EWM1024
36	Plug(CN251)	CKS3540
37	Gathering PCB	ENX1053
38	Motor Unit(M1)	EXA1490
39	Motor	EXM1027
40	Head Assy(HD1)	EXA1589
41	Motor Unit(M2)	EXA1580
42	Screw	BMZ20P022FMC
43	Bracket	ENC1528
44	Chassis Unit	EXA1582
45	Pinch Holder Unit	EXA1584
46	Pinch Roller	ENV1518
47	Pinch Holder Unit	EXA1583
48	Pinch Roller	ENV1518
49	Reel Unit	EXA1585
50	Head Base Unit	EXA1586
51	Lever Unit	EXA1587
52	Gear Unit	EXA1588
53	Motor Unit(Service)	EXX1055
54	Washer	HBF-179
55	Screw	CBA1250
56	Bracket	ENC1542
57	Arm	ENC1537

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM

● KEH-P6900R,P6900R-B



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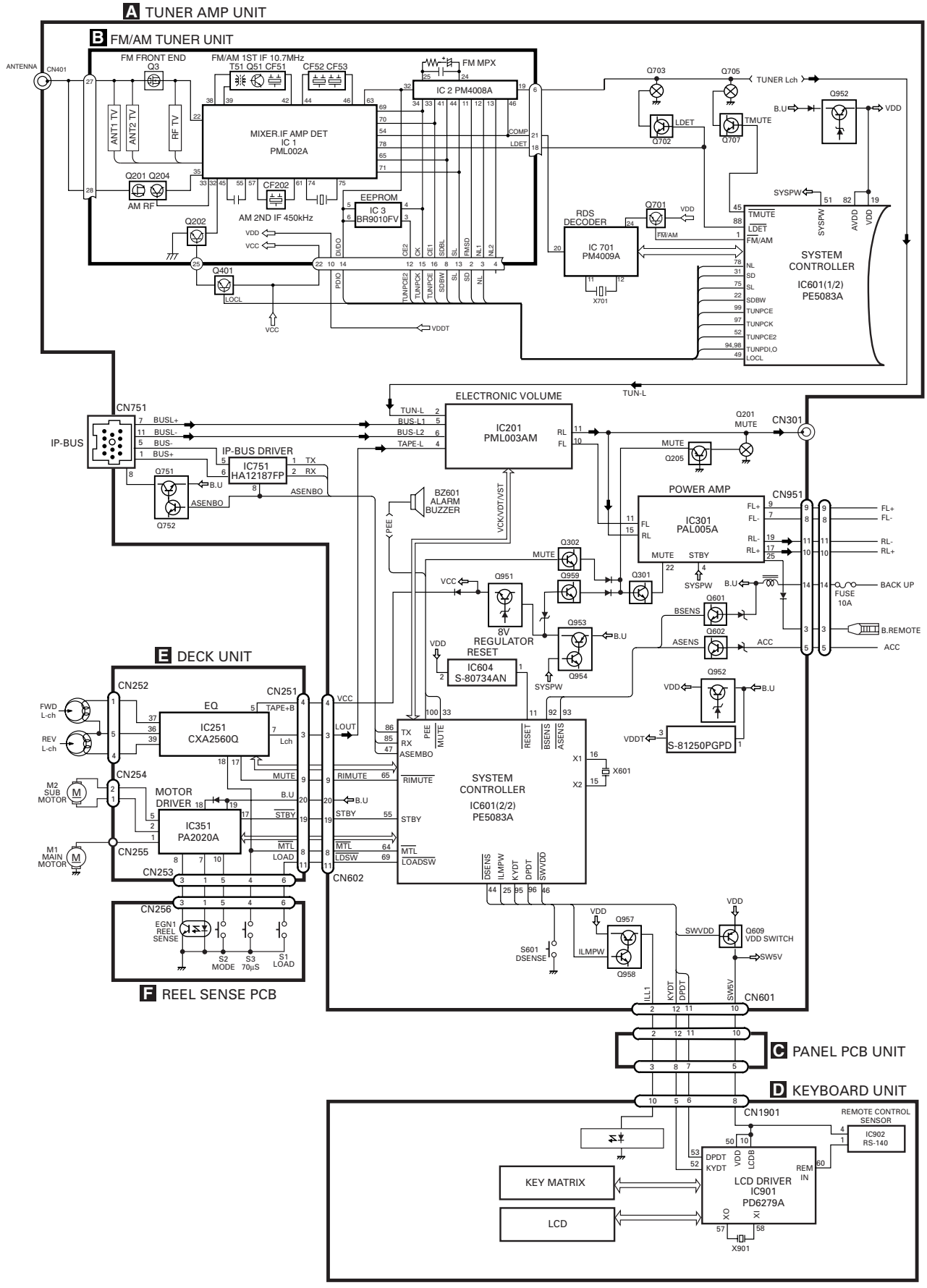
A TUNER AMP UNIT
B FM/AM TUNER UNIT
ANTENNA
CN401
FM FRONT END
Q3
FM/AM 1ST IF 10.7MHz
T51 Q51 CF51
CF52 CF53
FM MPX
IC 2 PM4008A
ANT1 TV
ANT2 TV
RF TV
MIXER.IF AMP DET
IC 1
PML002A
Q201 Q204
AM RF
CF202
EEPROM
IC 3
BR9010FV
Q202
AM 2ND IF 450kHz
VDD
VCC
Q401
LOCL
PDIO
TUNPCE2
TUNPCK
TUNPCE
SDBW
SL
SD
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VDDT
Q703
Q705
TUNER Lch
Q952
B.U
VDD
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Q702
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Q707
COMP
RDS
DECODER
IC 701
PM4009A
Q701
FM/AM
X701
SYSPW
TMUTE
LDET
FM/AM
SYSTEM
CONTROLLER
IC601(1/2)
PE5083A
SDBW
TUNPCE
TUNPCK
TUNPCE2
TUNPDI,O
LOCL
TUN-L
ELECTRONIC VOLUME
IC201
PML003AM
TUN-L
BUS-L1
BUS-L2
TAPE-L
RL
FL
Q201
MUTE
CN301
Q205
CN751
IP-BUS
BUSL+
BUSL-
BUS-
BUS+
IP-BUS DRIVER
IC751
HA12187FP
TX
RX
ASENBO
Q751
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BZ601
ALARM
BUZZER
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VCK/VDT/VST
POWER AMP
IC301
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CN951
FL+
FL-
RL-
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Q302
Q959
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IC251
CXA2560Q
TAPE+B
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CN254
M2
SUB
MOTOR
MOTOR
DRIVER
IC351
PA2020A
M1
MAIN
MOTOR
CN255
CN253
CN256
EGN1
REEL
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F REEL SENSE PCB
CN602
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IC601(2/2)
PE5083A
RIMUTE
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MTL
LOADSW
LDSW
DSENS
ILMPW
KYDT
DPDT
SWVDD
X601
S-81250PGPD
S601
DSENSE
Q957
Q958
Q609
VDD SWITCH
SW5V
SWVDD
ILL1
KYDT
DPDT
SW5V
CN601
C PANEL PCB UNIT
D KEYBOARD UNIT
CN1901
REMOTE CONTROL
SENSOR
IC902
RS-140
KEY MATRIX
LCD
LCD DRIVER
IC901
PD6279A
DPDT
KYDT
VDD
LCDB
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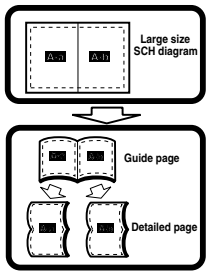
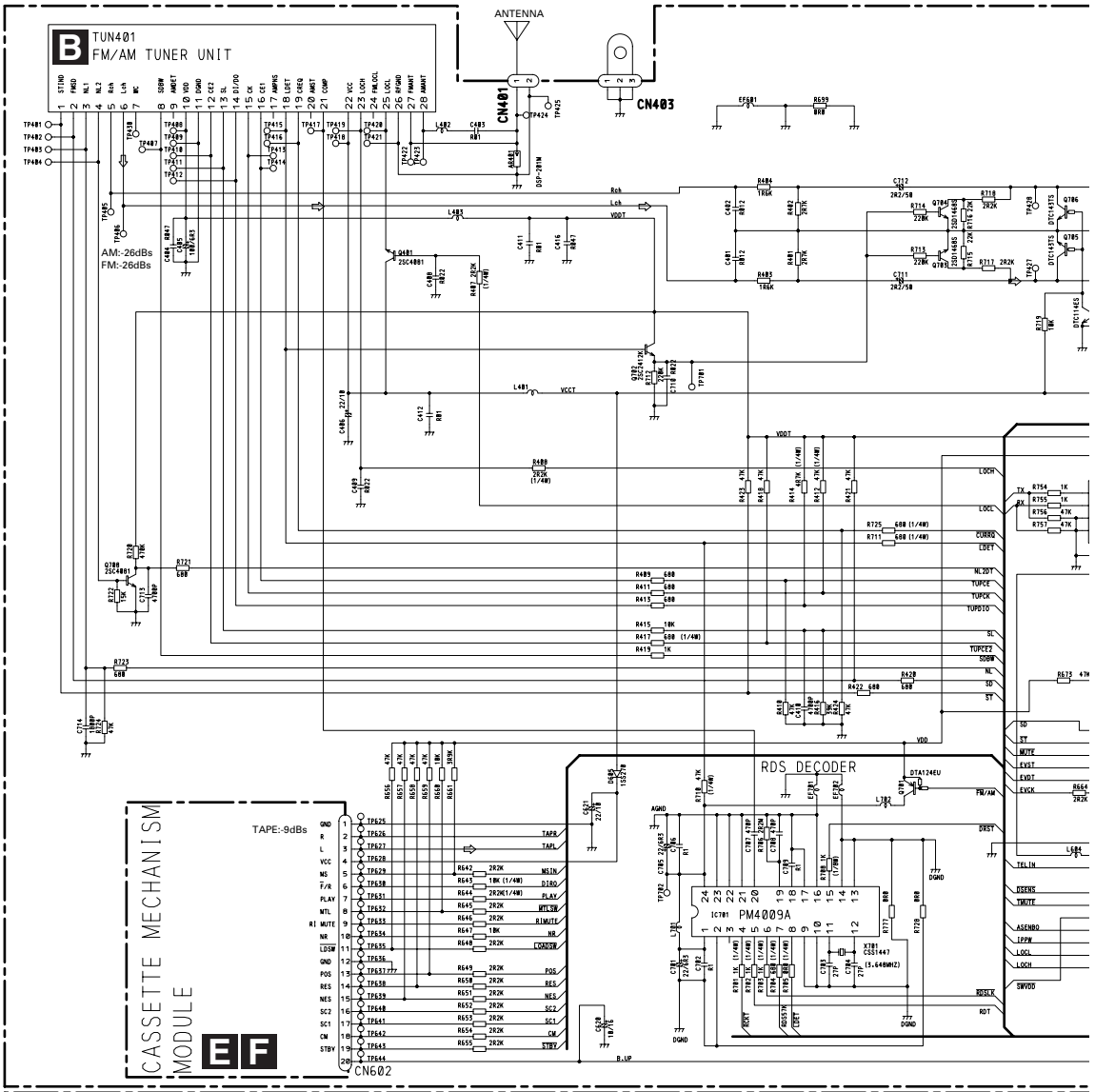
X901

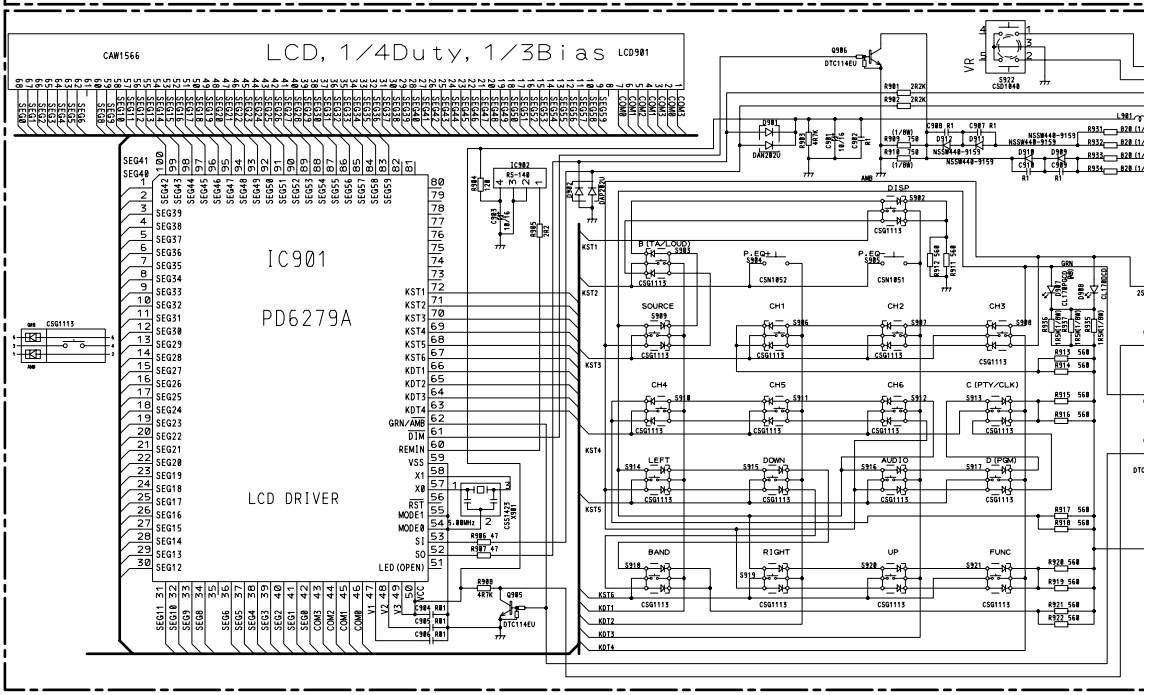
3.2 OVERALL CONNECTION DIAGRAM(GUIDE PAGE)(KEH-P6900R)

Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".



A-a

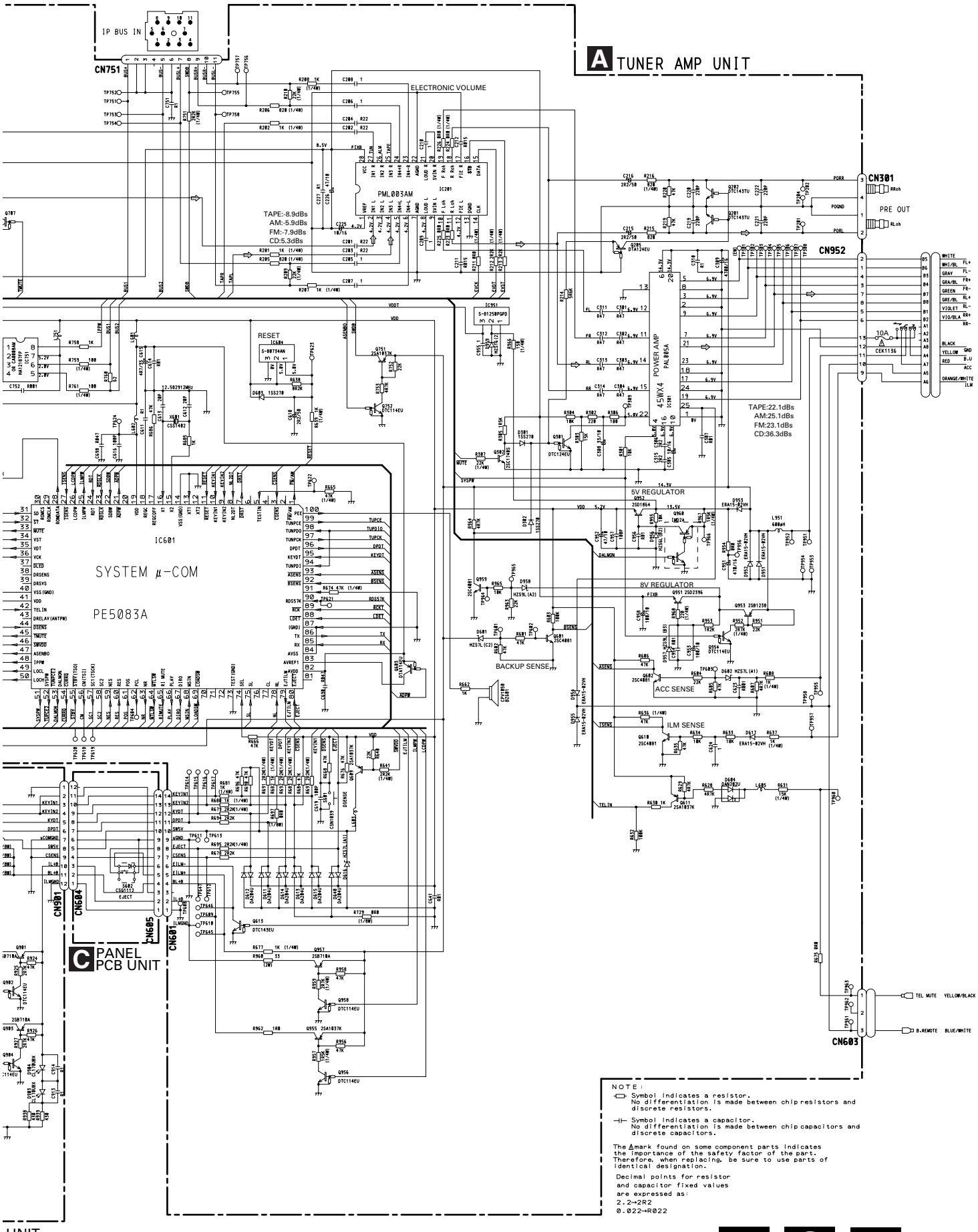




A D

D KEYBOARD

A-b

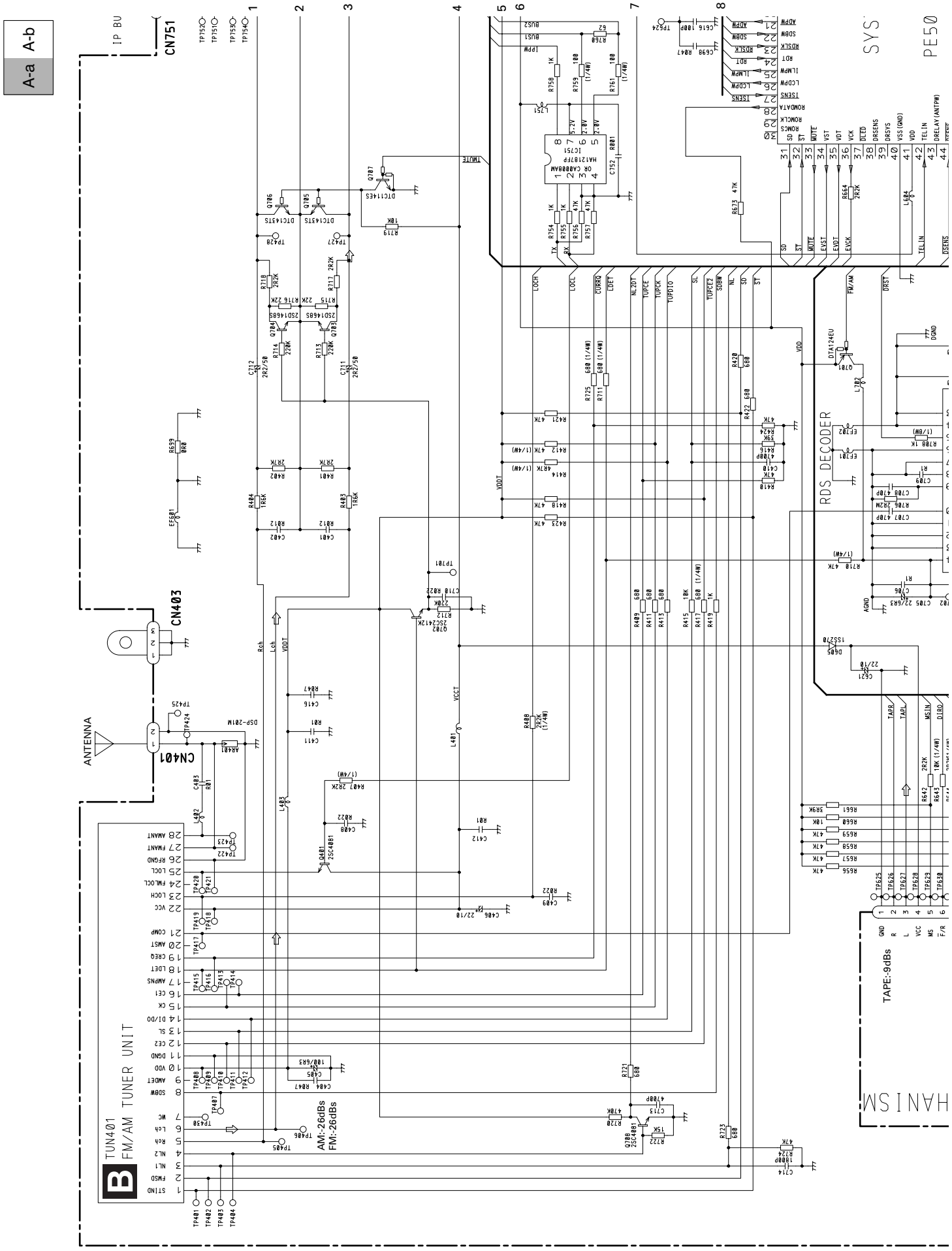


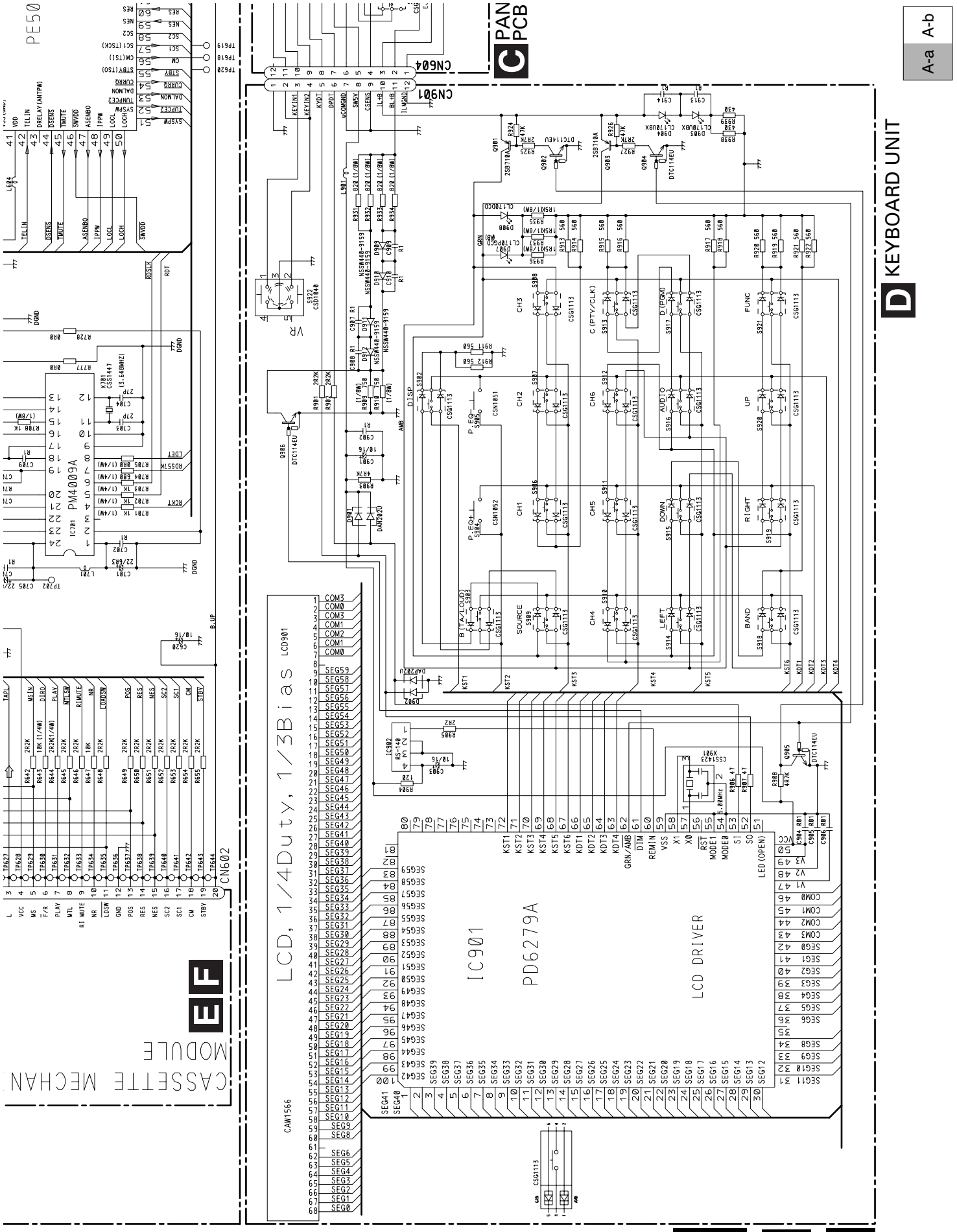
NOTE:
- Symbol indicates a resistor. No differentiation is made between chip resistors and discrete resistors.
- Symbol indicates a capacitor. No differentiation is made between chip capacitors and discrete capacitors.

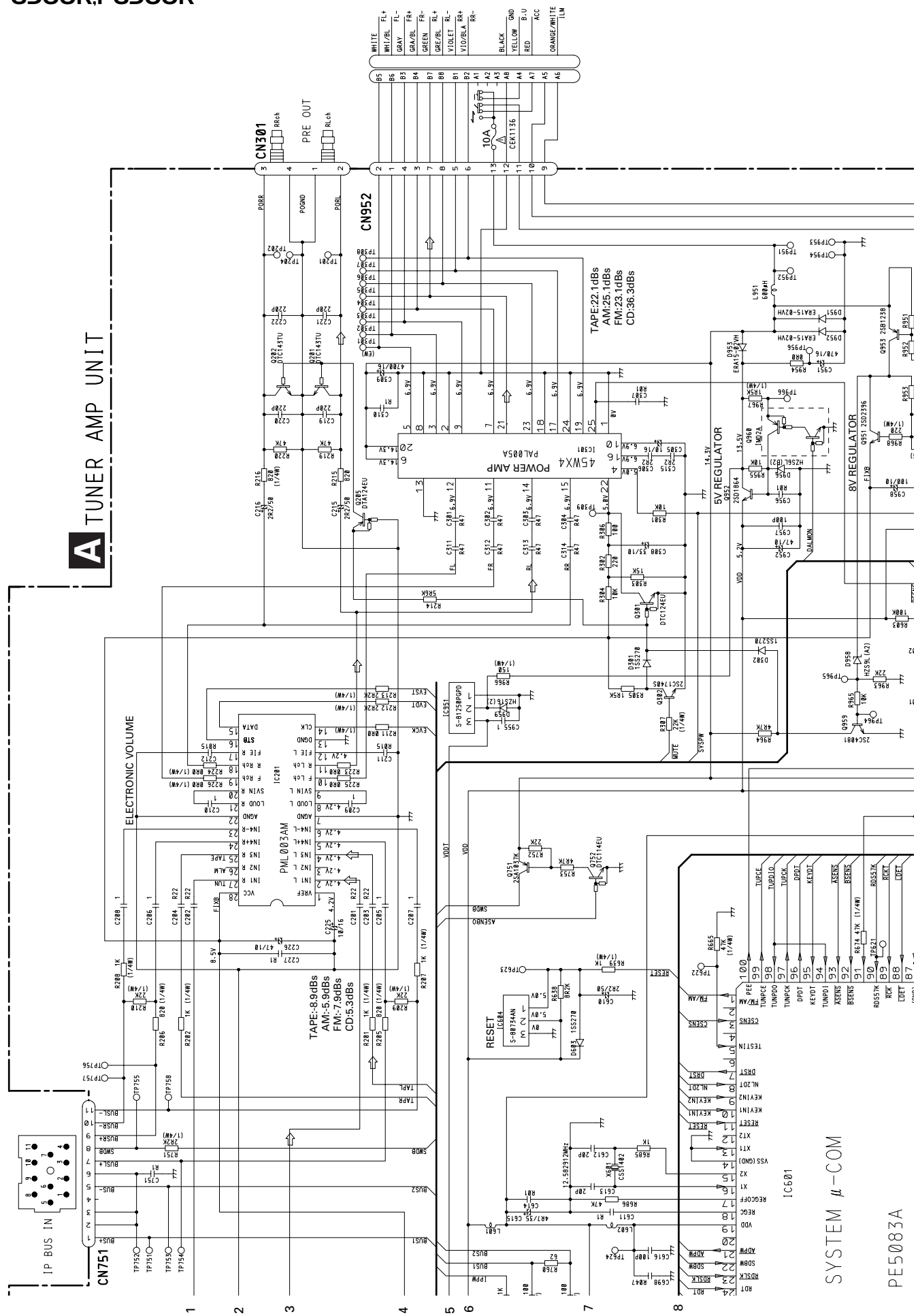
The △mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

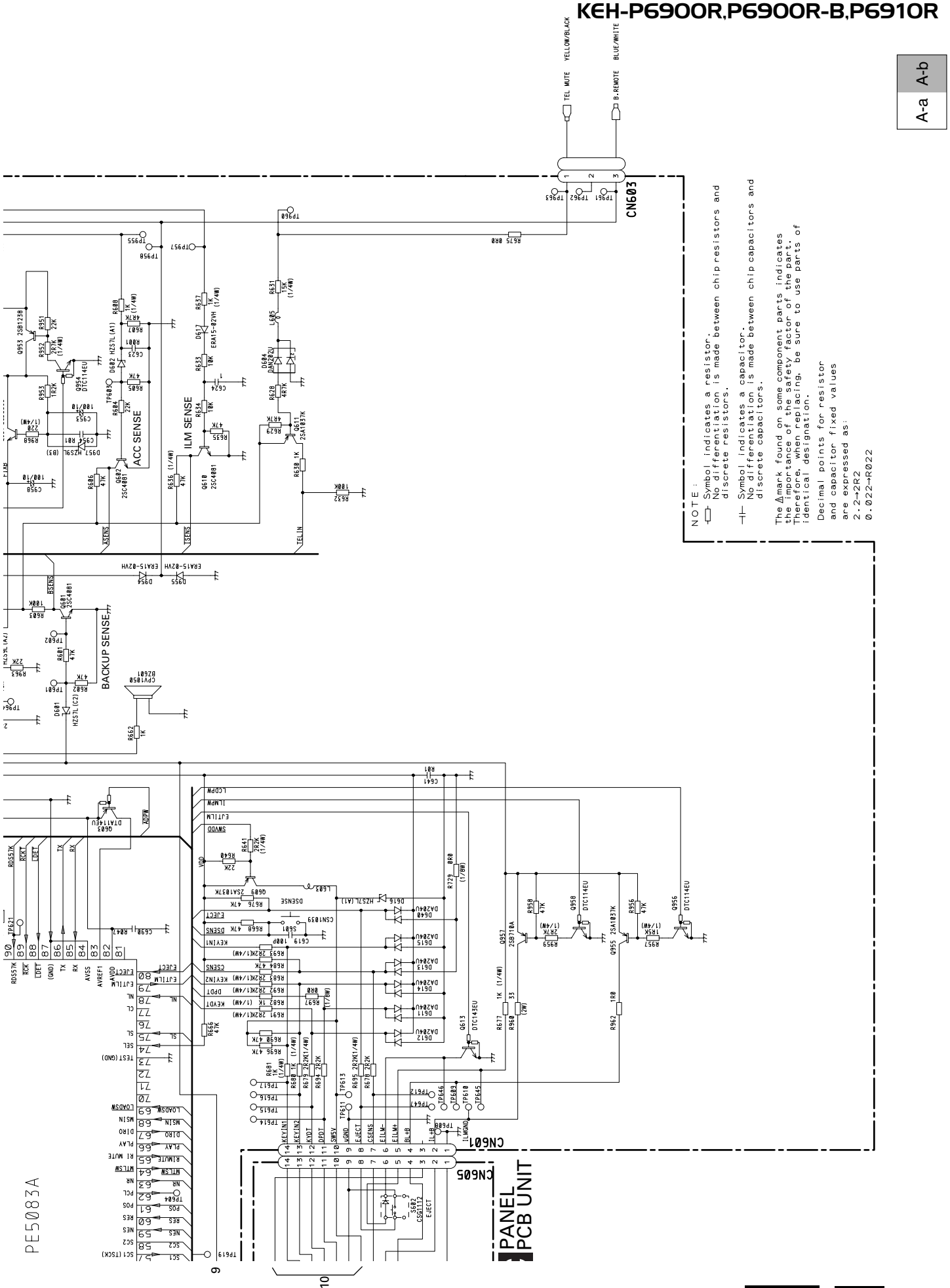
Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022

UNIT

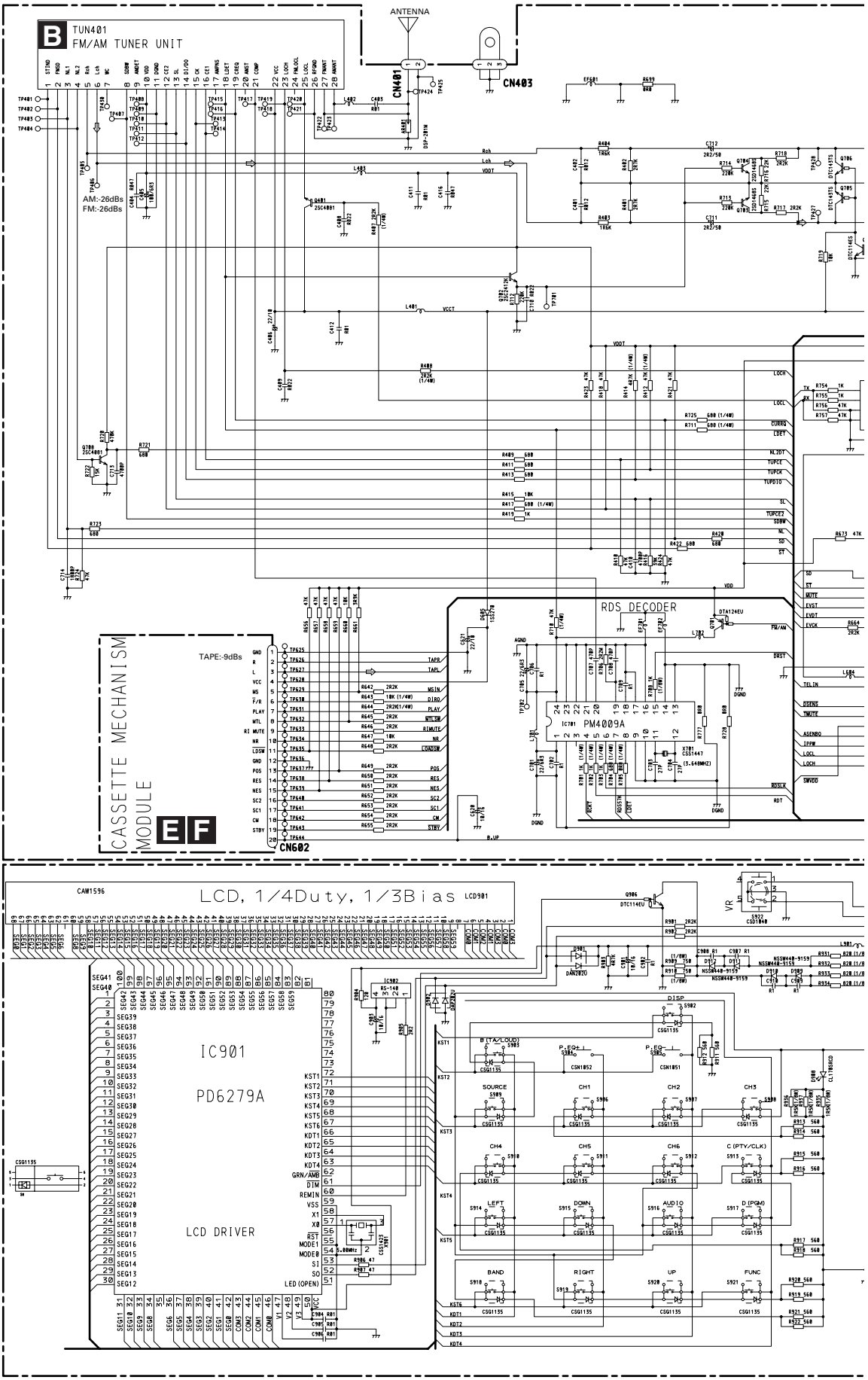

A-b
A-a
CN751
CN403
CN401
ANTENNA
TUN401
FM/AM TUNER UNIT
RDS DECODER
SYS
PE50
HANISM
TAPE:-9dBs
AM:-26dBs
FM:-26dBs


D KEYBOARD UNIT
C PAN PCB
E F CASSETTE MECHAN MODULE
CN901
CN604
CN602
IC901
PD6279A
LCD DRIVER
LCD, 1/4Duty, 1/3Bias
CAW1566
PE50
PM4009A
A-a
C
D

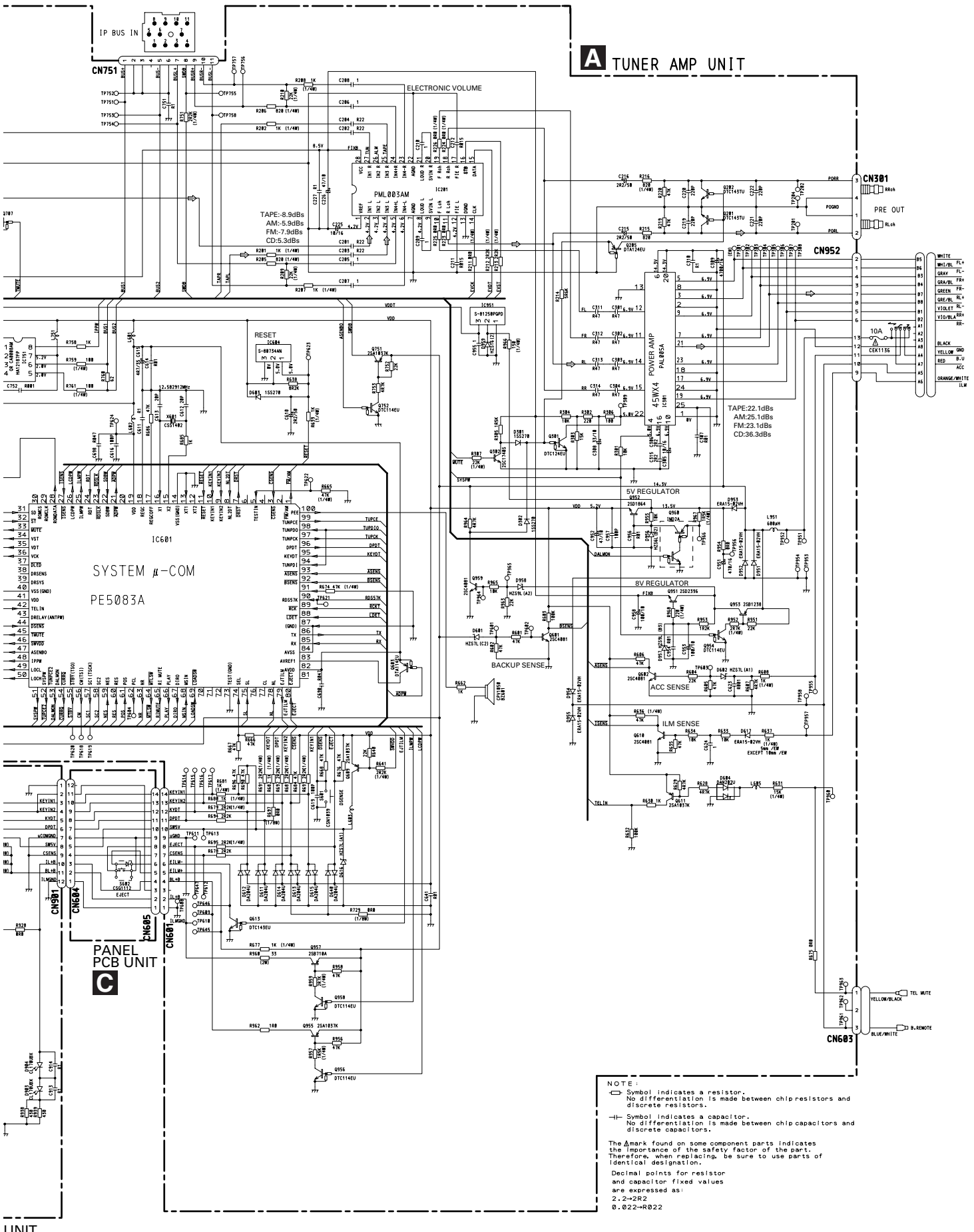

A-b
A-a
A TUNER AMP UNIT
CN301
PRE OUT
CN952
CN751
IP BUS IN
TAPE:22.1dBs
AM:25.1dBs
FM:23.1dBs
CD:36.3dBs
TAPE:-8.9dBs
AM:-5.9dBs
FM:-7.9dBs
CD:5.3dBs
POWER AMP
5V REGULATOR
8V REGULATOR
ELECTRONIC VOLUME
RESET
SYSTEM μ-COM
PE5083A


TEL MUTE
YELLOW/BLACK
B.REMOTE
BLUE/WHITE
CN603
ACC SENSE
ILM SENSE
BACKUP SENSE
PANEL PCB UNIT
CN601
CN605
PE5083A
NOTE:
Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.
Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.
The Δmark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022

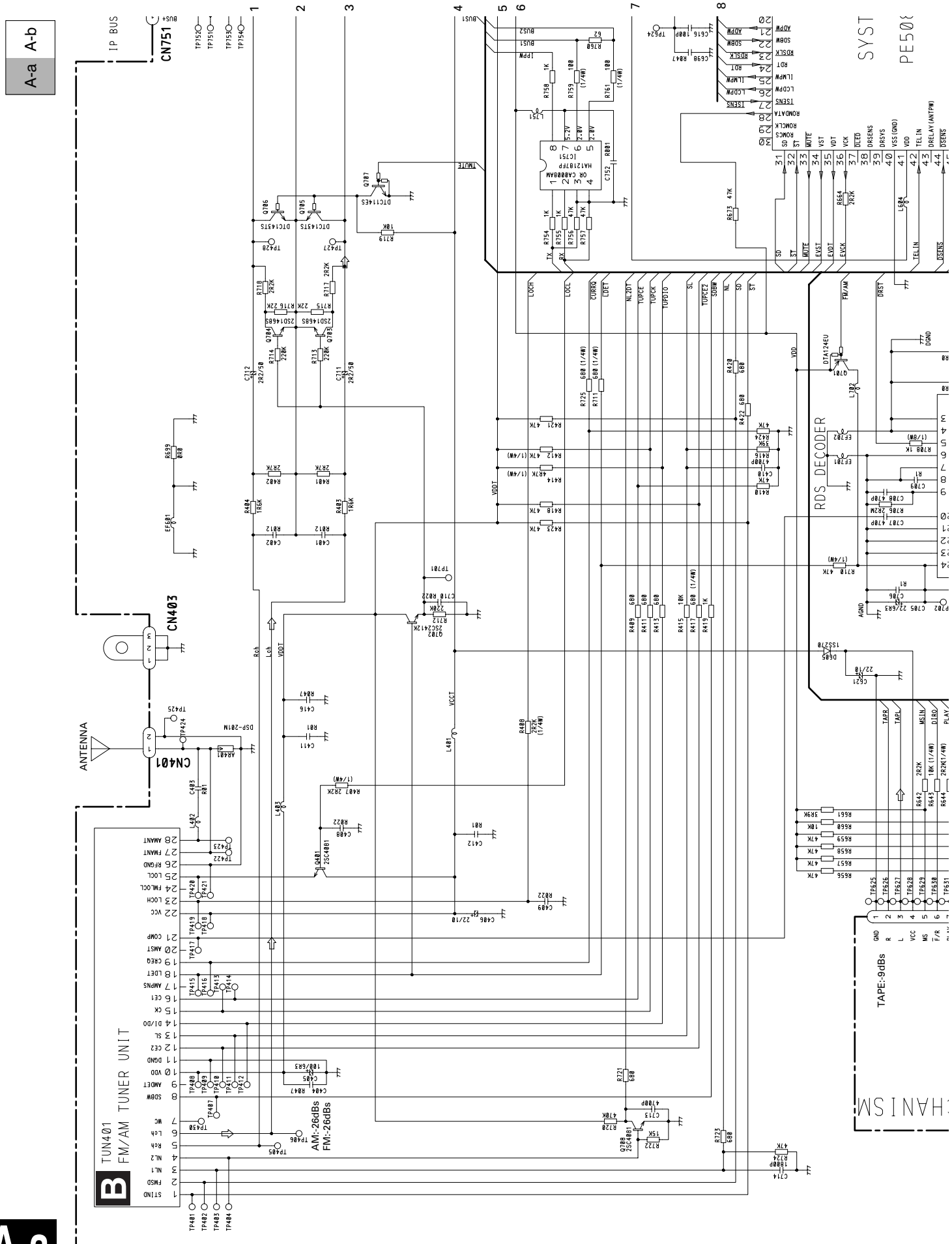
3.3 OVERALL CONNECTION DIAGRAM(GUIDE PAGE)(KEH-P6900R-B)

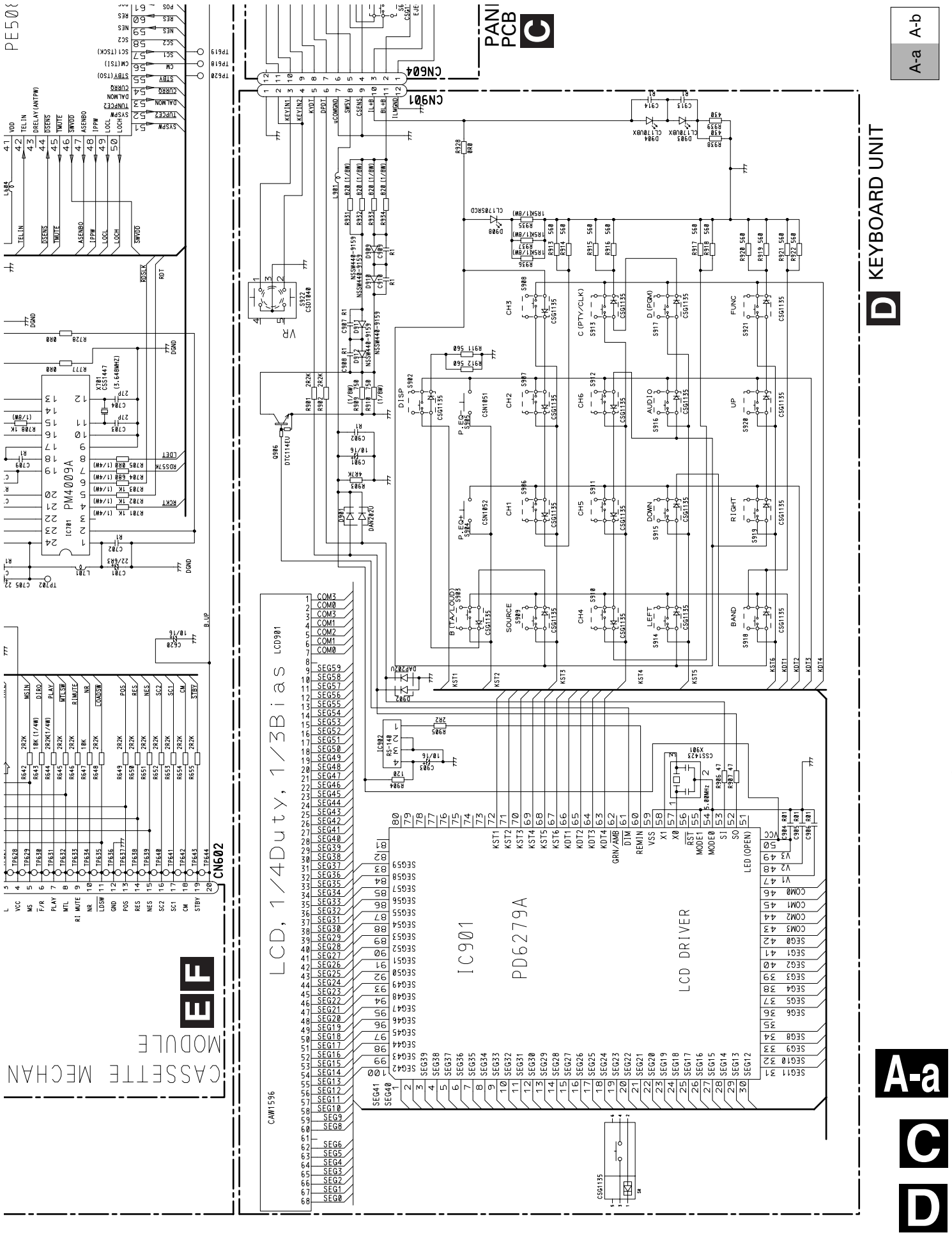


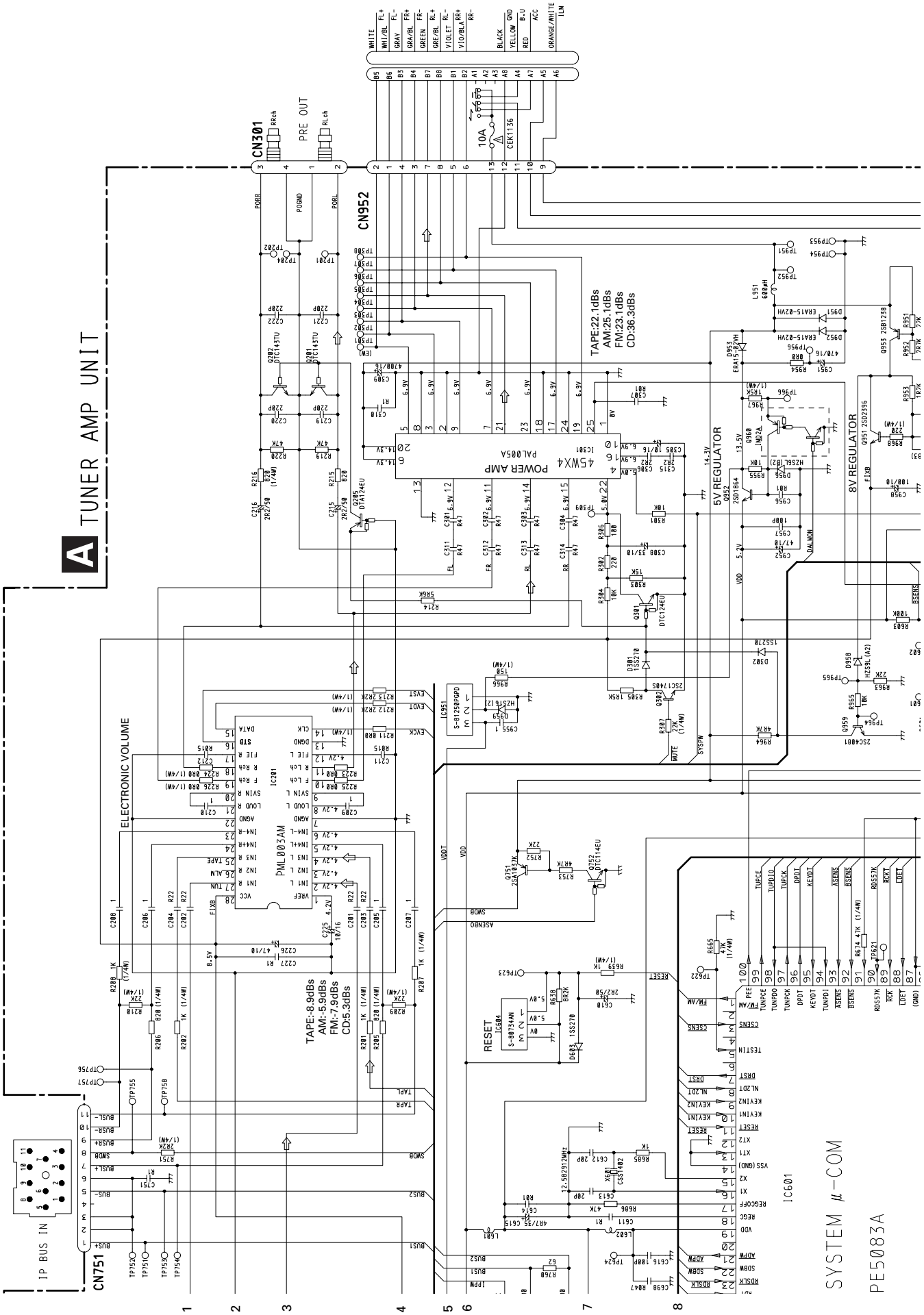
A-b

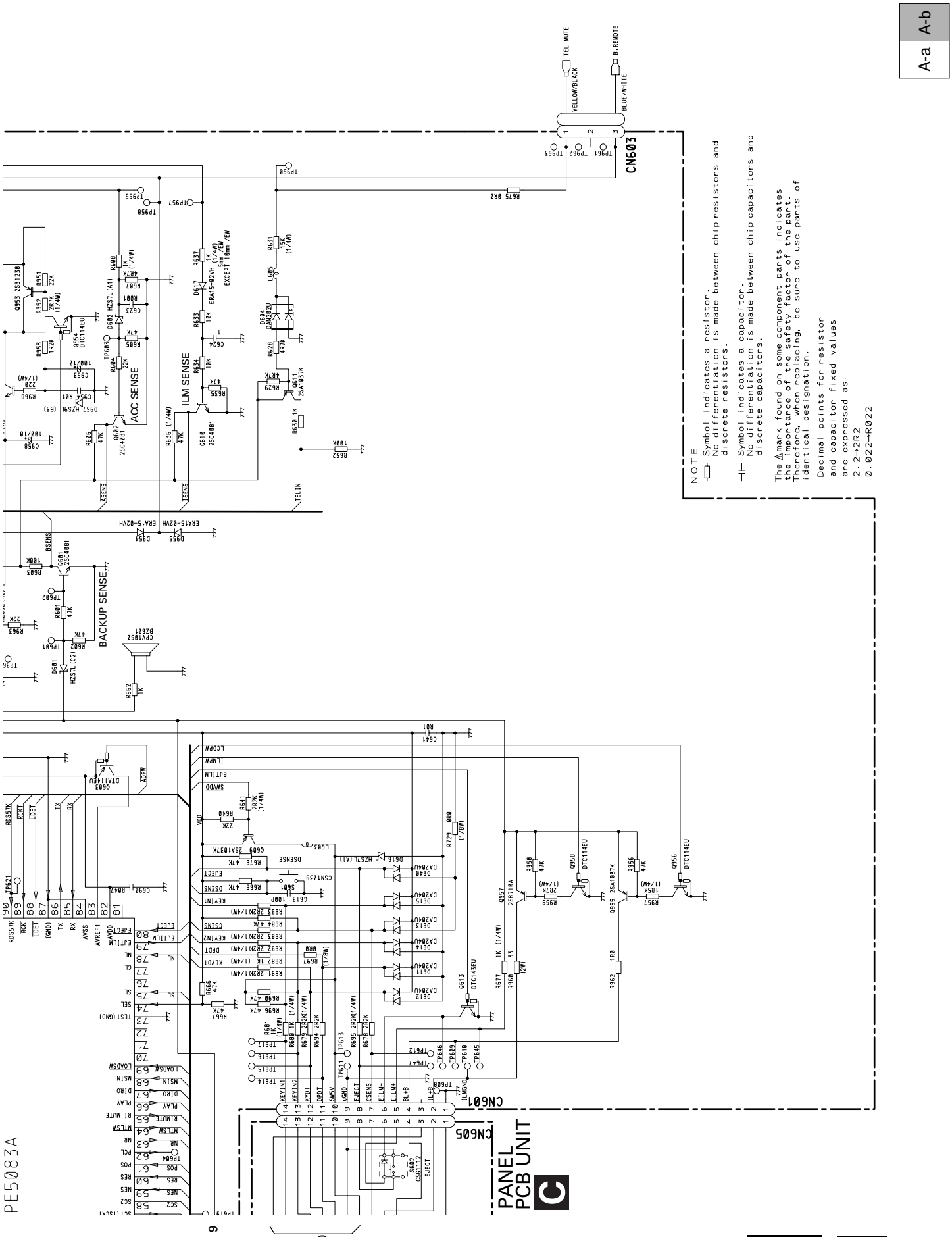

A TUNER AMP UNIT
IP BUS IN
CN751
ELECTRONIC VOLUME
PML003AM
TAPE:-8.9dBs
AM:-5.9dBs
FM:-7.9dBs
CD:5.3dBs
CN301
PRE OUT
CN952
POWER AMP
PAL005A
45W×4
10A
CEK1136
TAPE:22.1dBs
AM:25.1dBs
FM:23.1dBs
CD:36.3dBs
RESET
IC601
SYSTEM μ-COM
PE5083A
5V REGULATOR
8V REGULATOR
BACKUP SENSE
ACC SENSE
ILM SENSE
EXCEPT 18mm /EW
18mm /EW
CN901
CN604
CN605
CN602
CN601
PANEL
PCB UNIT
C
CN603
TEL MUTE
B.REMOTE
YELLOW/BLACK
BLUE/WHITE
WHITE
WHT/BL
GRAY
GRA/BL
GREEN
GRE/BL
VIOLET
VIO/BLA
BLACK
YELLOW
RED
ORANGE/WHITE
ACC
B.U
ILM
NOTE :
Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.
Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022

UNIT

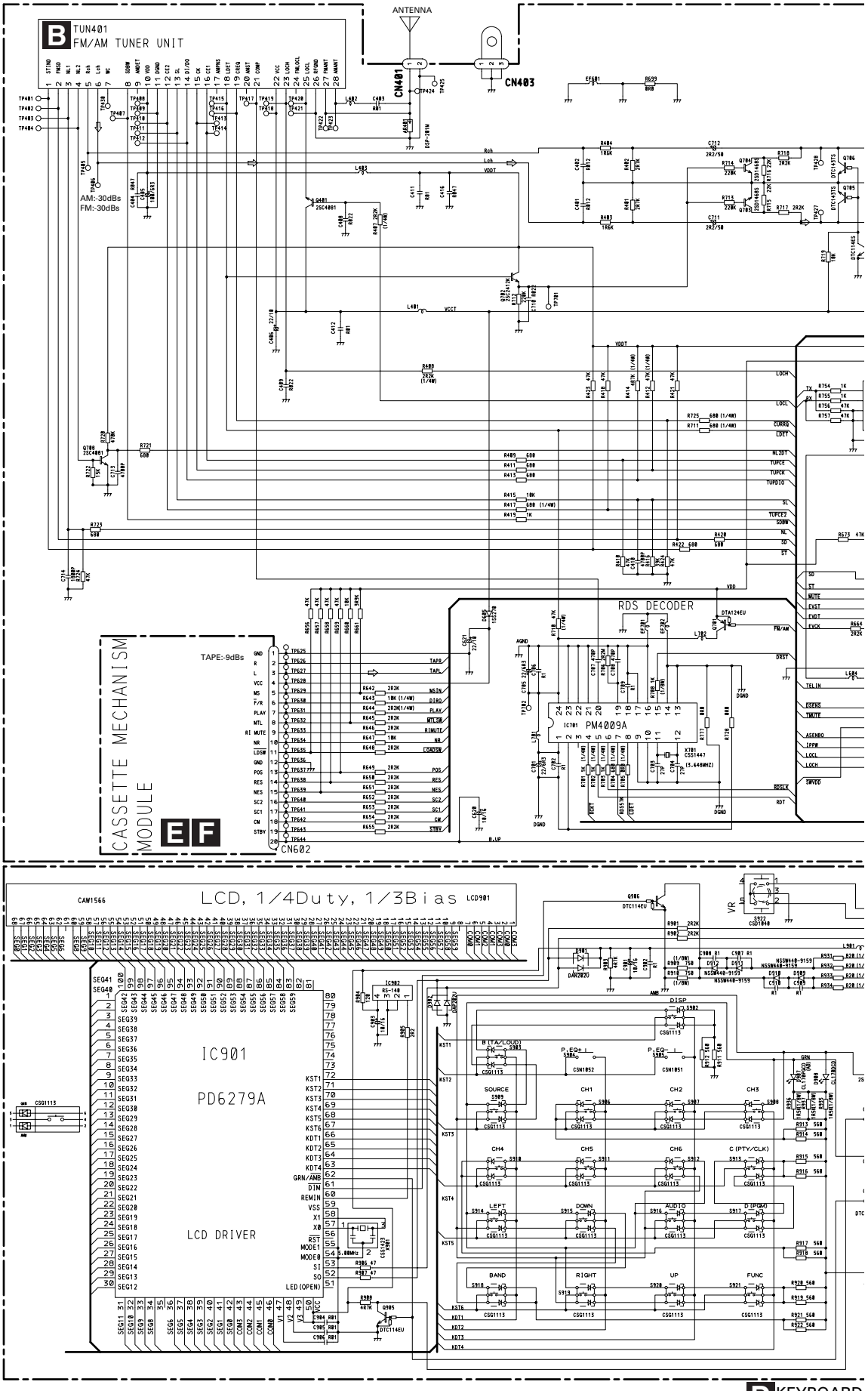

A-b
A-a
CN751
CN403
CN401
ANTENNA
TUN401
FM/AM TUNER UNIT
TAPE:-9dBs
AM:-26dBs
FM:-26dBs
RDS DECODER
SYST
PE50


KEYBOARD UNIT
PANI PCB
CN901
CN604
CN602
LCD, 1/4Duty, 1/3Bias
IC901
PD6279A
LCD DRIVER
CASSETTE MECHAN MODULE
PE501
IC701 PM4009A
S901
S902
S903
S904
S905
S906
S907
S908
S909
S910
S911
S912
S913
S914
S915
S916
S917
S918
S919
S920
S921
S922
D901
D902
D903
D904
D905
D906
D907
D908
D909
D910
D911
D912
Q901
Q902
Q903
Q904
Q905
Q906
Q907
Q908
Q909
Q910
Q911
Q912
Q913
Q914
Q915
Q916
Q917
Q918
Q919
Q920
Q921
Q922
Q923
Q924
Q925
Q926
Q927
Q928
Q929
Q930
Q931
Q932
Q933
Q934
Q935
Q936
Q937
Q938
Q939
Q940

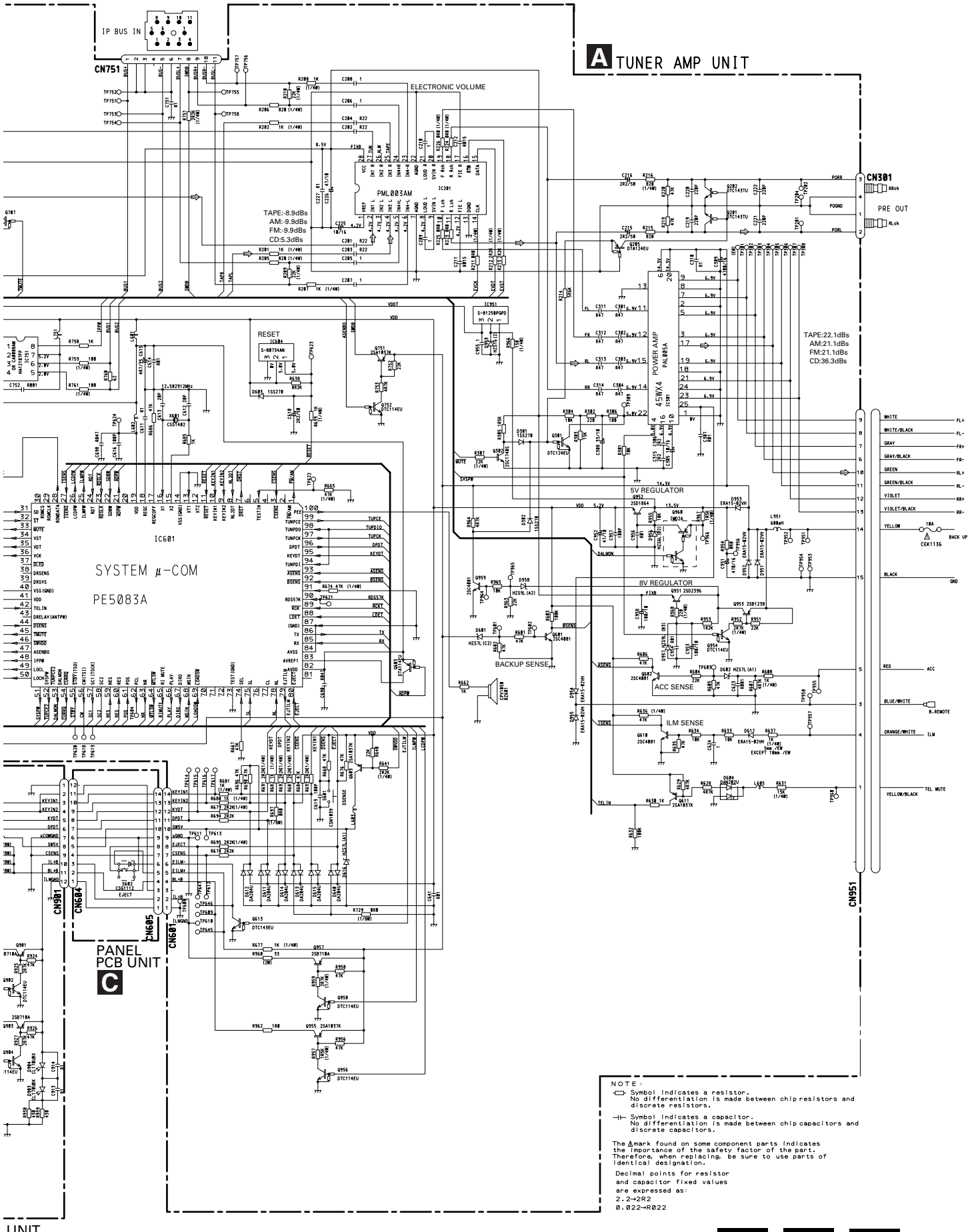

A-b
A-a
A TUNER AMP UNIT
CN301
PRE OUT
CN952
POWER AMP
PAL005A
45WX4
TAPE:22.1dBs
AM:25.1dBs
FM:23.1dBs
CD:36.3dBs
5V REGULATOR
8V REGULATOR
ELECTRONIC VOLUME
PML003AM
TAPE:-8.9dBs
AM:-5.9dBs
FM:-7.9dBs
CD:5.3dBs
RESET
IC601
SYSTEM μ-COM
PE5083A
IP BUS IN
CN751


A-a A-b
TEL MUTE
B.REMOTE
YELLOW/BLACK
BLUE/WHITE
CN603
ACC SENSE
ILM SENSE
BACKUP SENSE
CN601
CN605
PANEL PCB UNIT
C
PE5083A
NOTE:
Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.
Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.
The Δmark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022

3.4 OVERALL CONNECTION DIAGRAM(GUIDE PAGE)(KEH-P6910R)



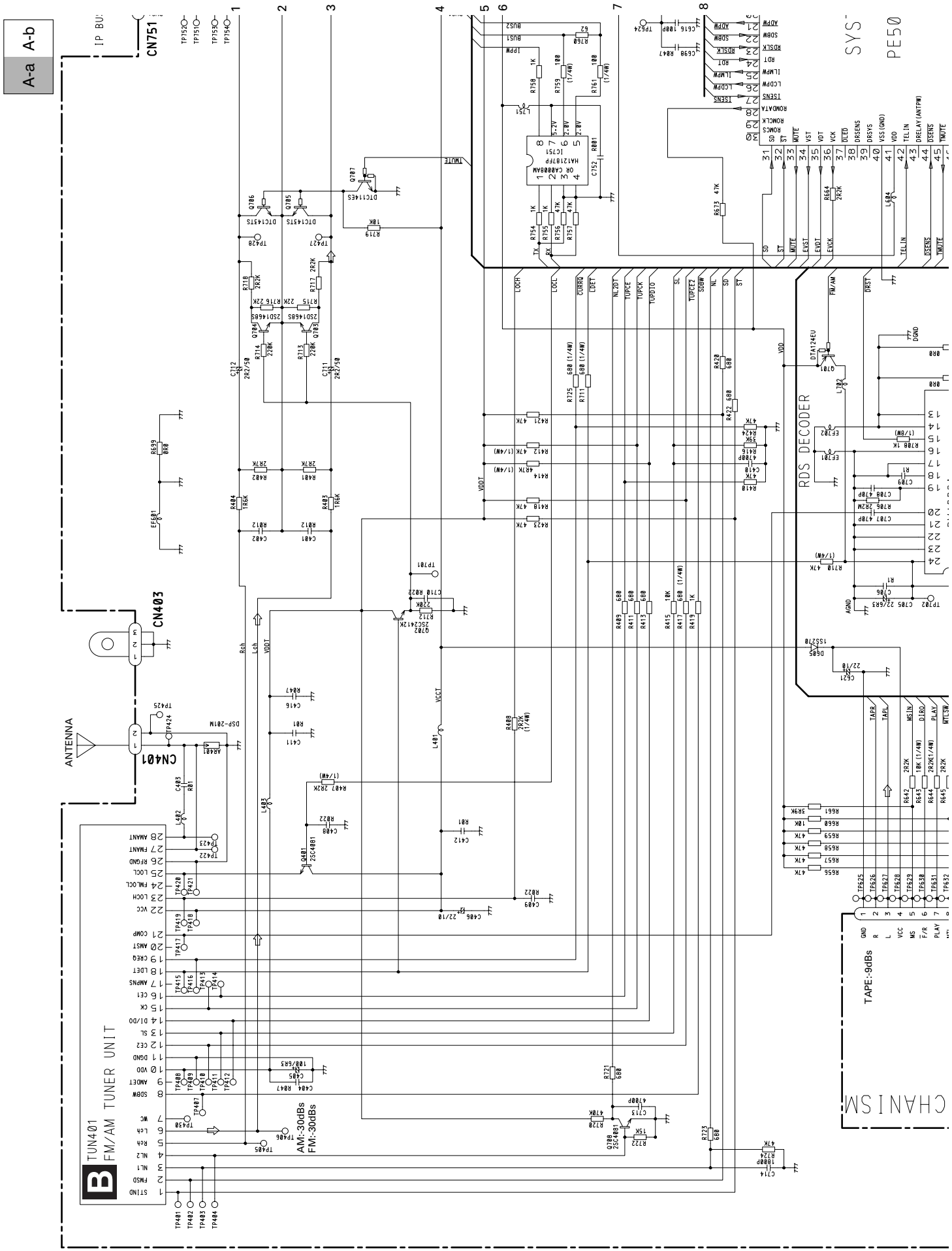
A-b

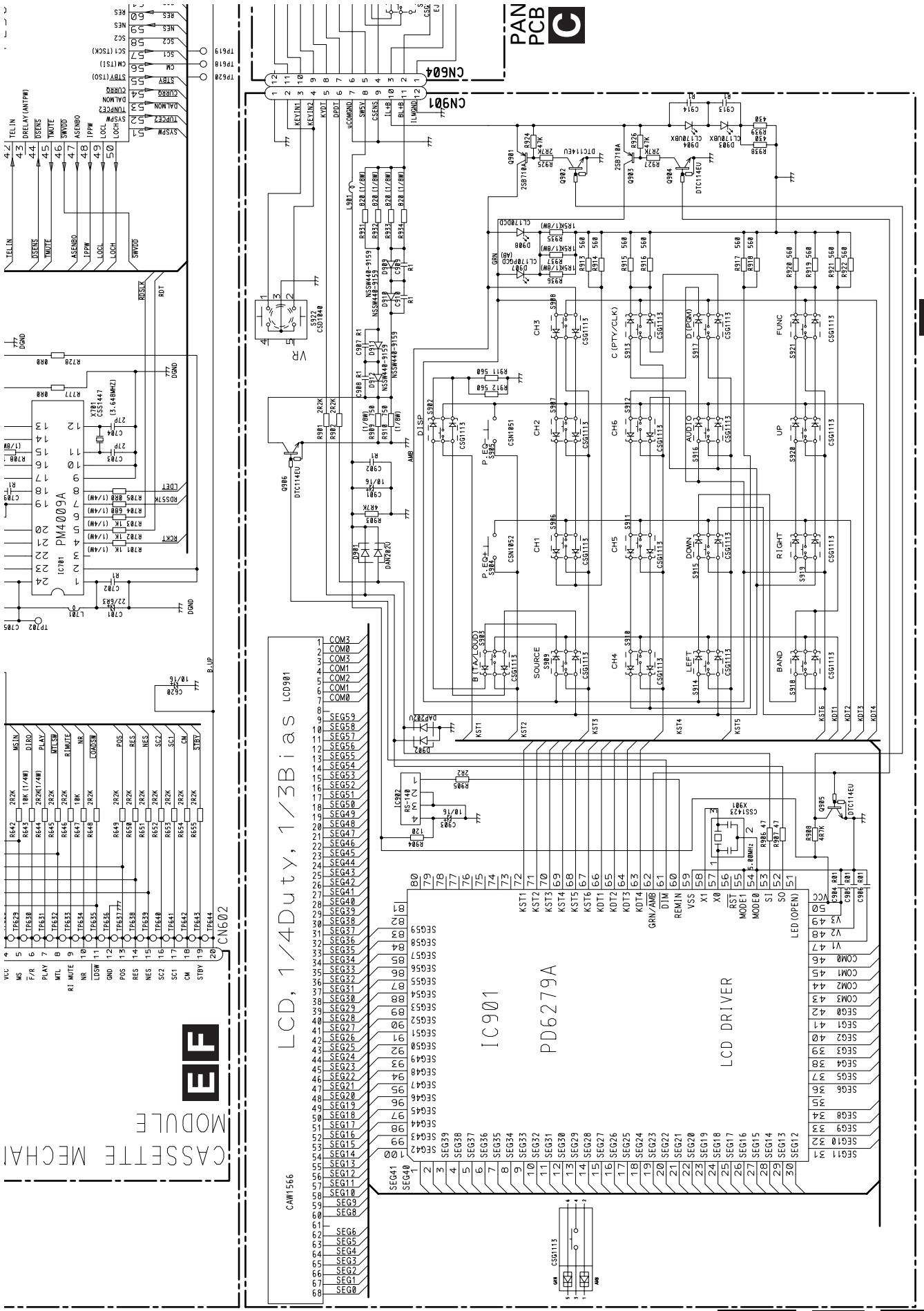


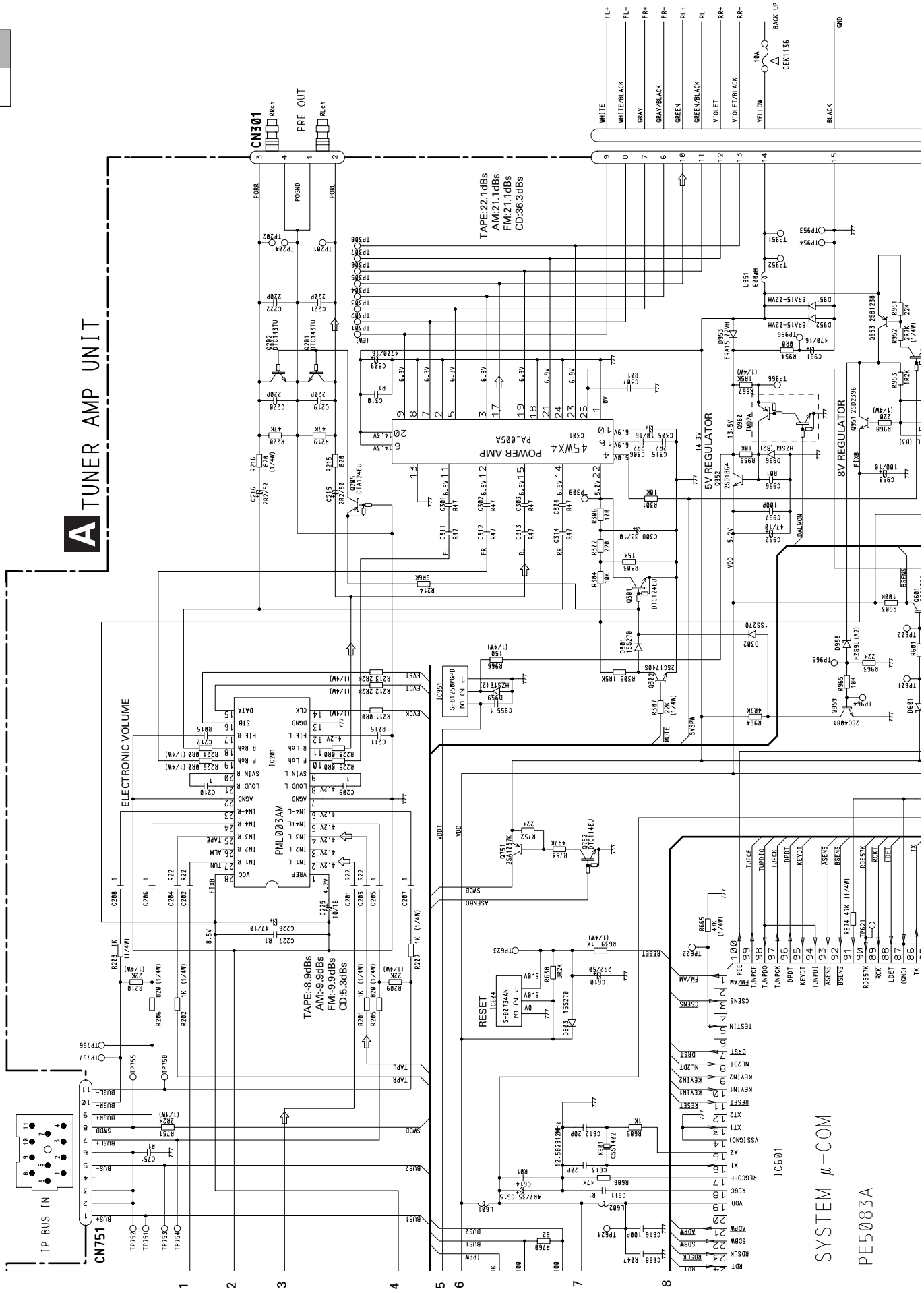
NOTE:
- Symbol indicates a resistor. No differentiation is made between chip resistors and discrete resistors.
- Symbol indicates a capacitor. No differentiation is made between chip capacitors and discrete capacitors.

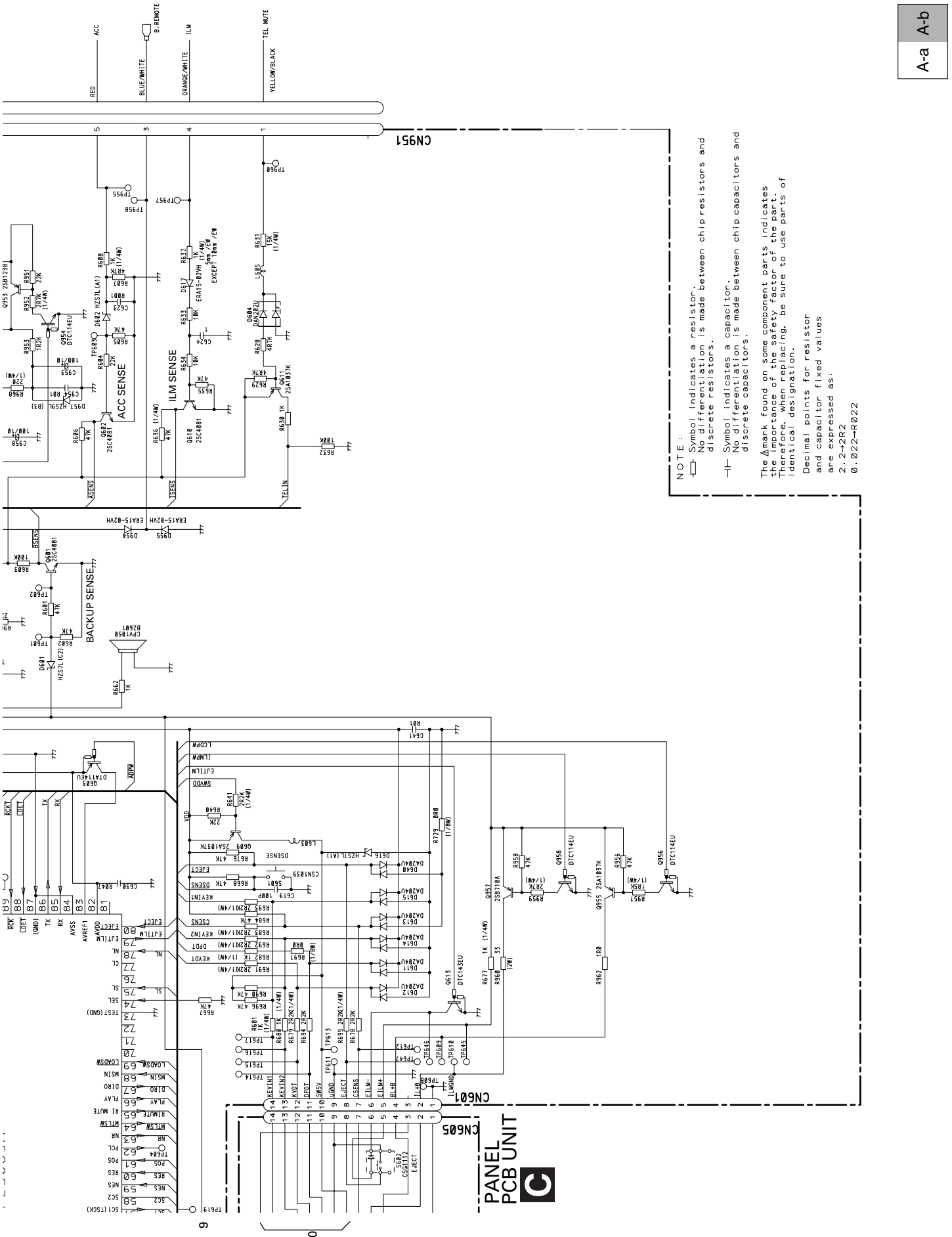
The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022


A-b
A-a
CN751
CN403
CN401
ANTENNA
TUN401
FM/AM TUNER UNIT
RDS DECODER
SYS-
PE50
CHANISM
TAPE:-9dBs
AM:-30dBs
FM:-30dBs
DTA124EU
DTC114ES
DTC143TS
2SD1468S
2SC4081
2SC2412K
HA12187FP
IC751
CA0080AW

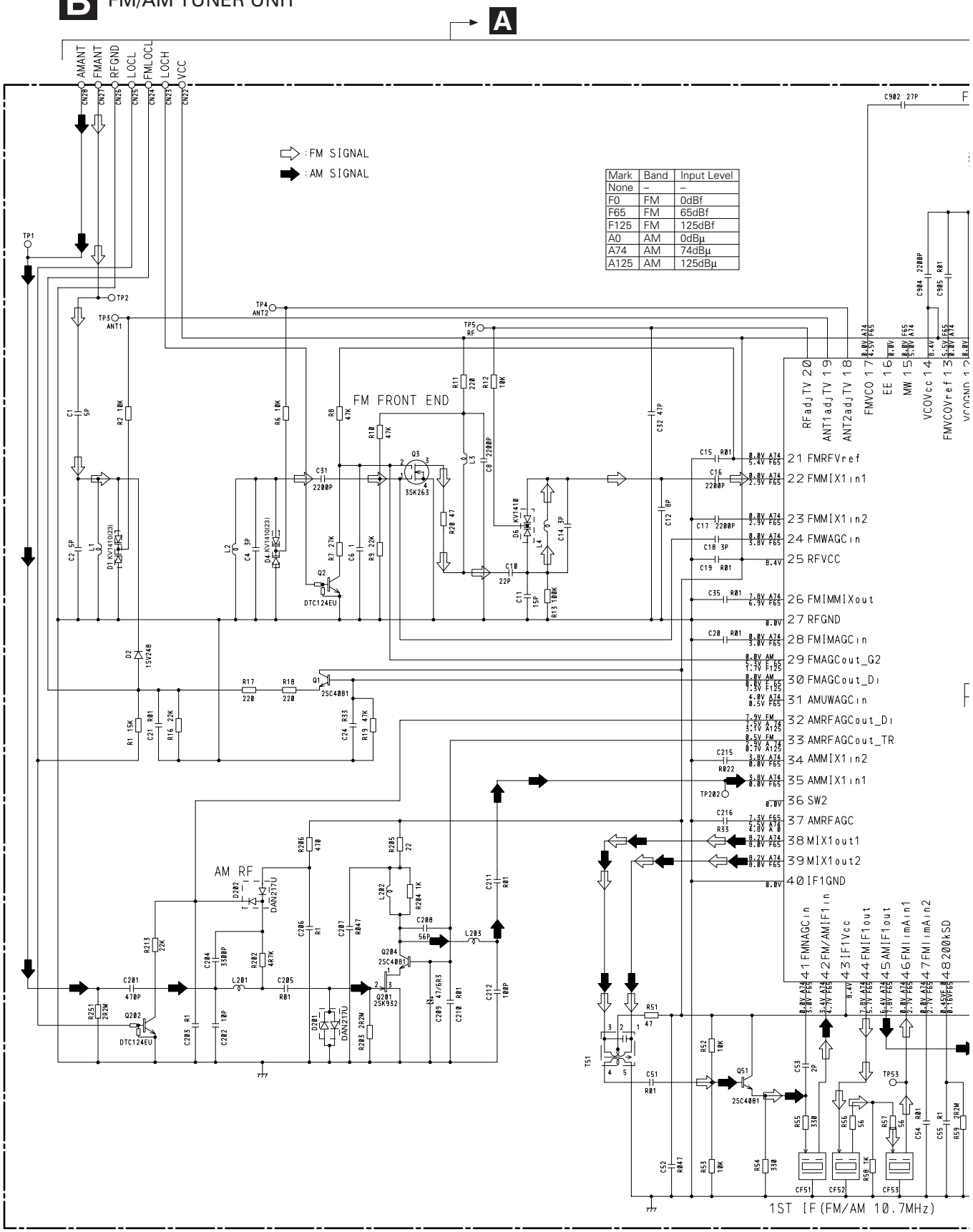

A-b
A-a
PAN PCB
C
CN604
CN901
D KEYBOARD UNIT
CASSETTE MECHANISM MODULE
E F
CN602
LCD, 1/4Duty, 1/3Bias LCD901
CAW1566
IC901
PD6279A
LCD DRIVER
IC101 PM4009A
X701 CSS1447 (3.640MHz)
X901 CSS1423 5.00MHz
VR
S302 CDD1048
TELIN
DSENS
TMUTE
ASENBO
1PPW
LOCL
LOCH
SWVDD
RDSCLK
RDT
DGND
B_UP
AMB
GRN
KST1
KST2
KST3
KST4
KST5
KST6
KDT1
KDT2
KDT3
KDT4
P_EQ
DISP
AUDIO
UP
DOWN
RIGHT
LEFT
SOURCE
BAND
FUNC
D (PGM)
C (PTY/CLK)
B (TA/LOUD)
A (PWR)
CH1
CH2
CH3
CH4
CH5
CH6
MS1N
DIRO
PLAY
MTLSW
R1MUTE
NR
LOADSW
POS
RES
NES
SCL
CM
STBY

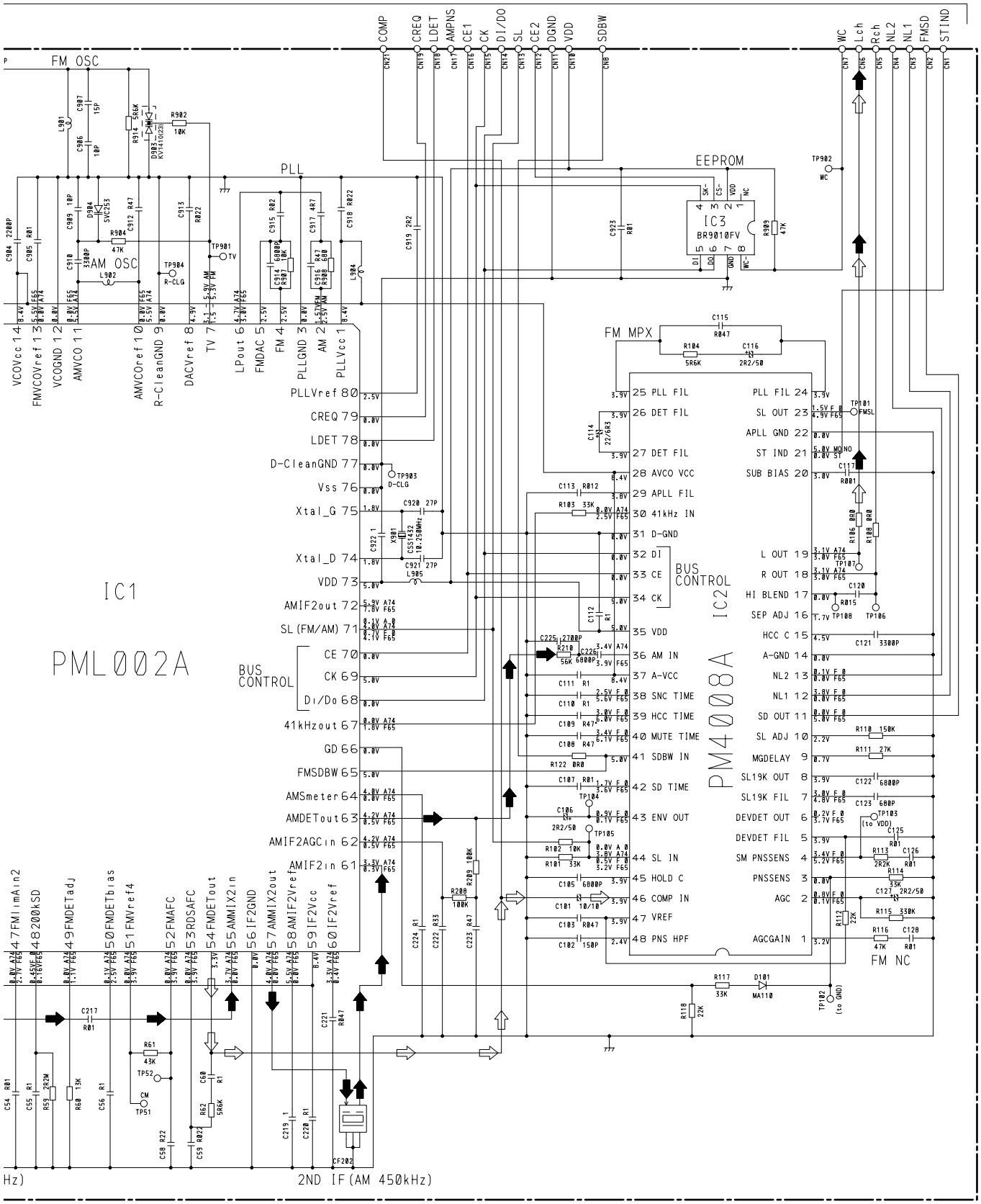

A TUNER AMP UNIT
CN301
PRE OUT
RRch
RLch
PORR
PORL
POGND
TAPE:22.1dBs
AM:21.1dBs
FM:21.1dBs
CD:36.3dBs
POWER AMP
45WX4
PAL005A
IC301
5V REGULATOR
8V REGULATOR
ELECTRONIC VOLUME
PML003AM
IC201
TAPE:-8.9dBs
AM:-9.9dBs
FM:-9.9dBs
CD:5.3dBs
RESET
IC604
S-80734AN
IC602
S-8125BPGPD
IC351
CN751
IP BUS IN
SYSTEM μ-COM
PE5083A
IC601
WHITE
WHITE/BLACK
GRAY
GRAY/BLACK
GREEN
GREEN/BLACK
VIOLET
VIOLET/BLACK
YELLOW
BLACK
BACK UP
GND
FL+
FL-
FR+
FR-
RL+
RL-
RR+
RR-


A-b
A-a
ACC
B.REMOTE
ILM
TEL MUTE
RED
BLUE/WHITE
ORANGE/WHITE
YELLOW/BLACK
CN951
ACC SENSE
ILM SENSE
BACKUP SENSE
NOTE :
Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.
Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.
The Δmark found on some component parts indicates the importance of the safety factor of the part.
Therefore, when replacing, be sure to use parts of identical designation.
Decimal points for resistor and capacitor fixed values are expressed as:
2.2→2R2
0.022→R022
CN601
CN605
PANEL PCB UNIT
C

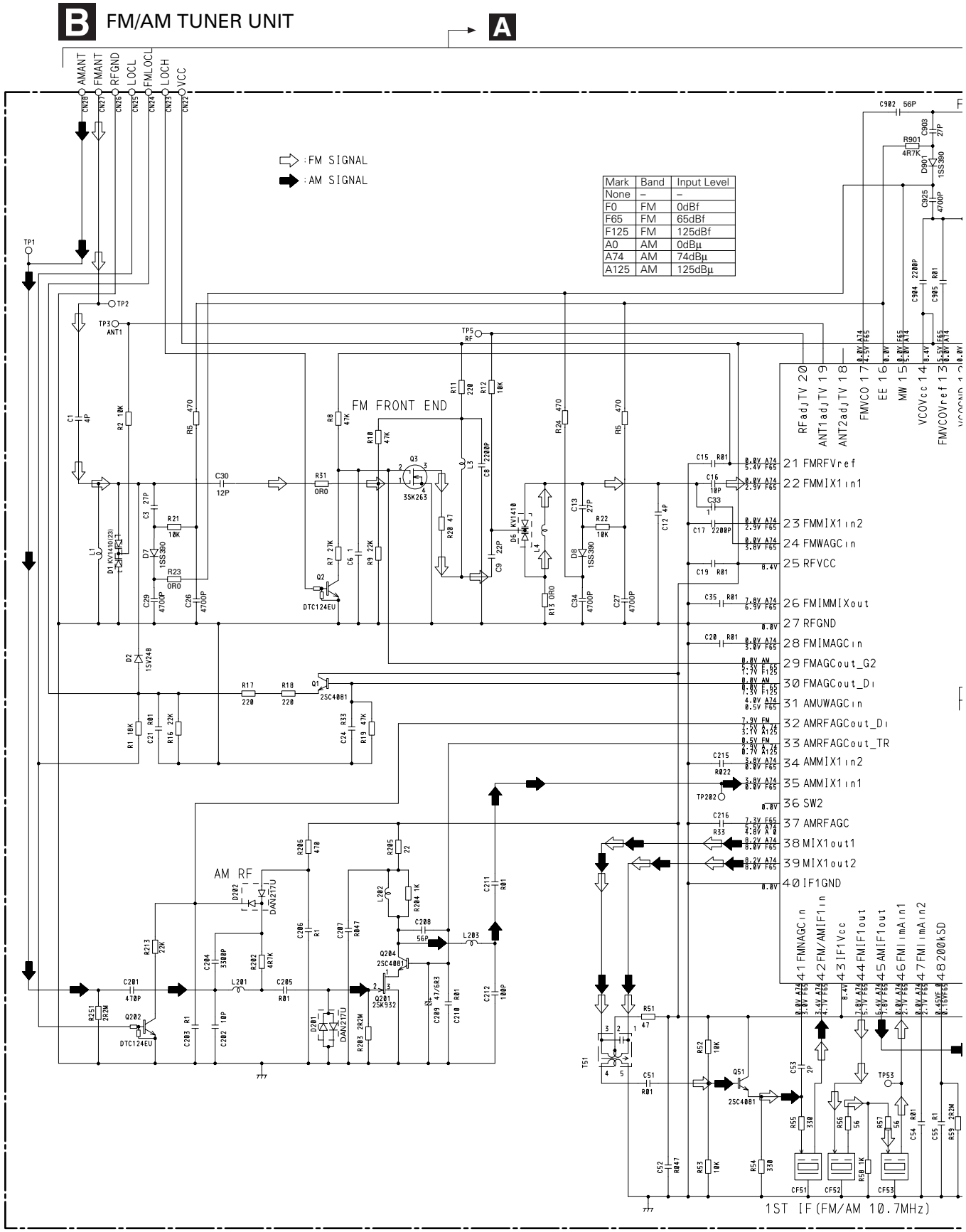
3.5 FM/AM TUNER UNIT(KEH-P6900R,P6900R-B)

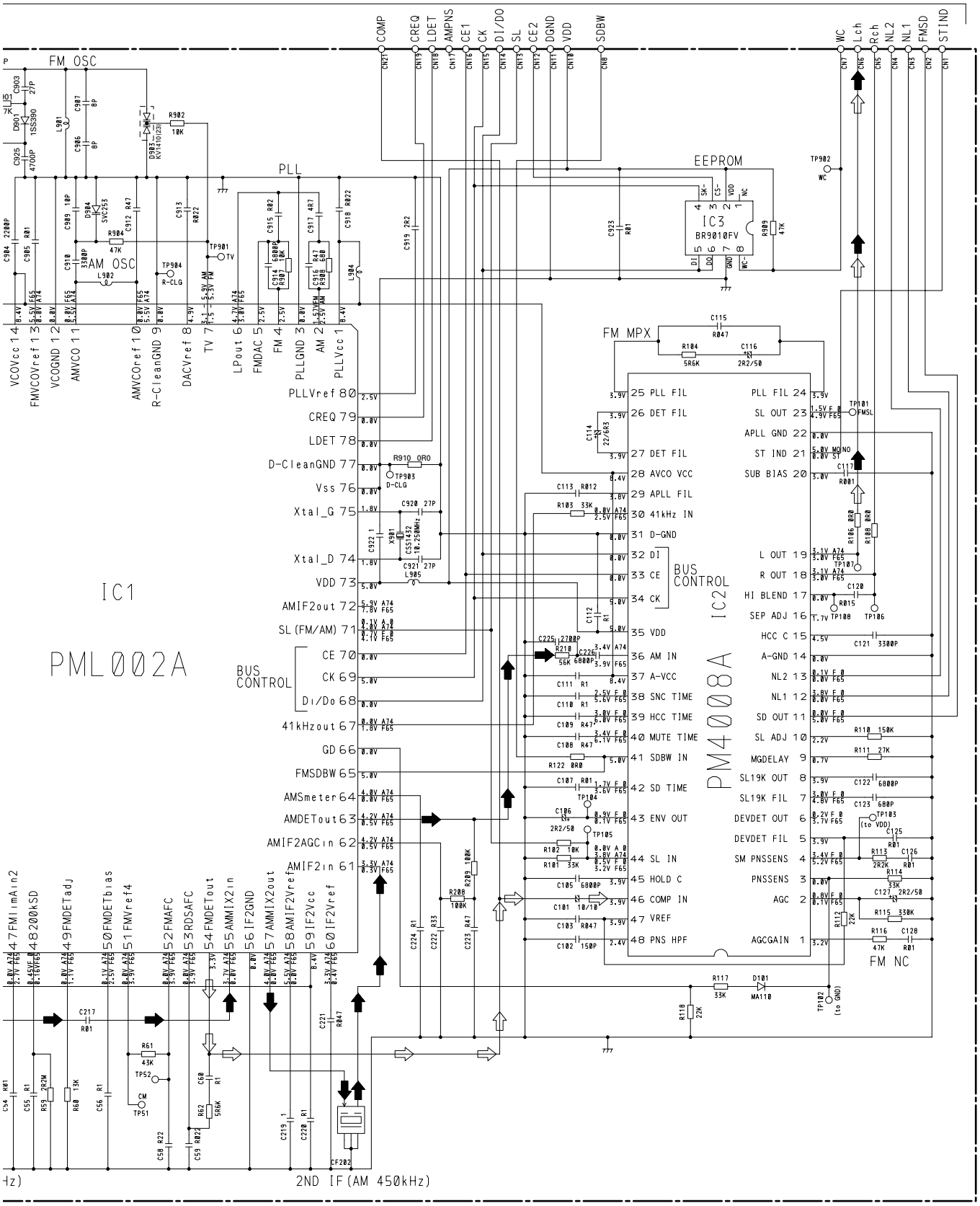
B FM/AM TUNER UNIT



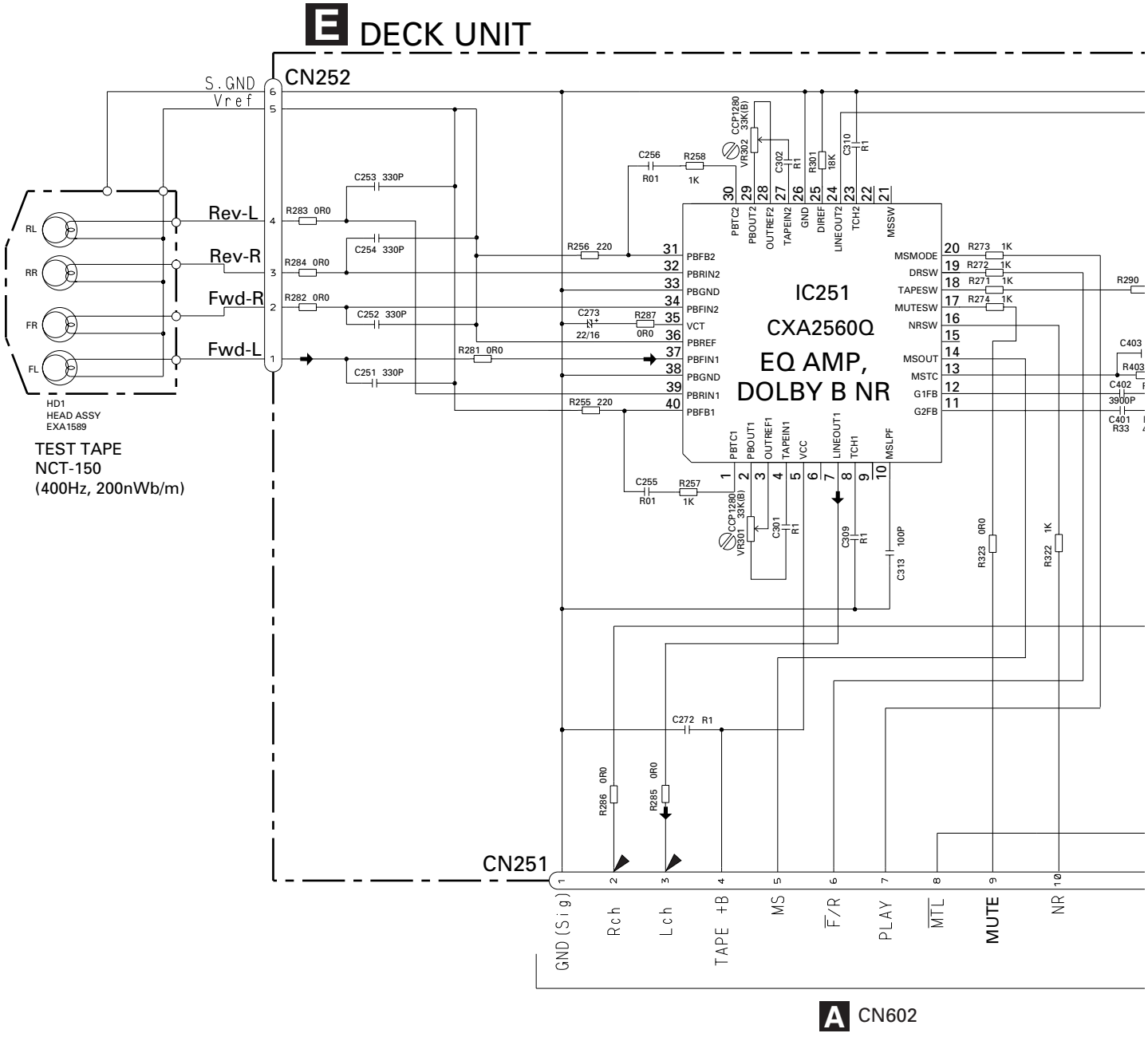

FM OSC
AM OSC
PLL
EEPROM
IC3
BR9010FV
FM MPX
IC1
PML002A
IC2
PM4008A
BUS CONTROL
FM NC
2ND IF (AM 450kHz)
COMP
CREQ
LDET
AMPNS
CE1
CK
DI/DO
SL
CE2
DGND
VDD
SDBW
WC
Lch
Rch
NL2
NL1
FMSD
STIND
VCOVcc 14
FMVCOVref 13
VCOGND 12
AMVCO 11
AMVCOref 10
R-CleanGND 9
DACVref 8
TV 7
LPout 6
FMDAC 5
FM 4
PLLGND 3
AM 2
PLLVcc 1
PLLVref 80
CREQ 79
LDET 78
D-CleanGND 77
Vss 76
Xtal_G 75
Xtal_D 74
VDD 73
AMIF2out 72
SL (FM/AM) 71
CE 70
CK 69
DI/DO 68
41kHzout 67
GD 66
FMSDBW 65
AMSmeter 64
AMDETout 63
AMIF2AGCin 62
AMIF2in 61
47FMIinAin2
48200kSD
49FMDETadj
50FMDETbias
51FMVref4
52FMAFC
53RDSAFC
54FMDETout
55AMMIX2in
56IF2GND
57AMMIX2out
58AMIF2Vref
59IF2Vcc
60IF2Vref
25 PLL FIL
26 DET FIL
27 DET FIL
28 AVCO VCC
29 APLL FIL
30 41kHz IN
31 D-GND
32 DI
33 CE
34 CK
35 VDD
36 AM IN
37 A-VCC
38 SNC TIME
39 HCC TIME
40 MUTE TIME
41 SDBW IN
42 SD TIME
43 ENV OUT
44 SL IN
45 HOLD C
46 COMP IN
47 VREF
48 PNS HPF
PLL FIL 24
SL OUT 23
APLL GND 22
ST IND 21
SUB BIAS 20
L OUT 19
R OUT 18
HI BLEND 17
SEP ADJ 16
HCC C 15
A-GND 14
NL2 13
NL1 12
SD OUT 11
SL ADJ 10
MGDELAY 9
SL19K OUT 8
SL19K FIL 7
DEVDET OUT 6
DEVDET FIL 5
SM PNSSENS 4
PNSSENS 3
AGC 2
AGCGAIN 1

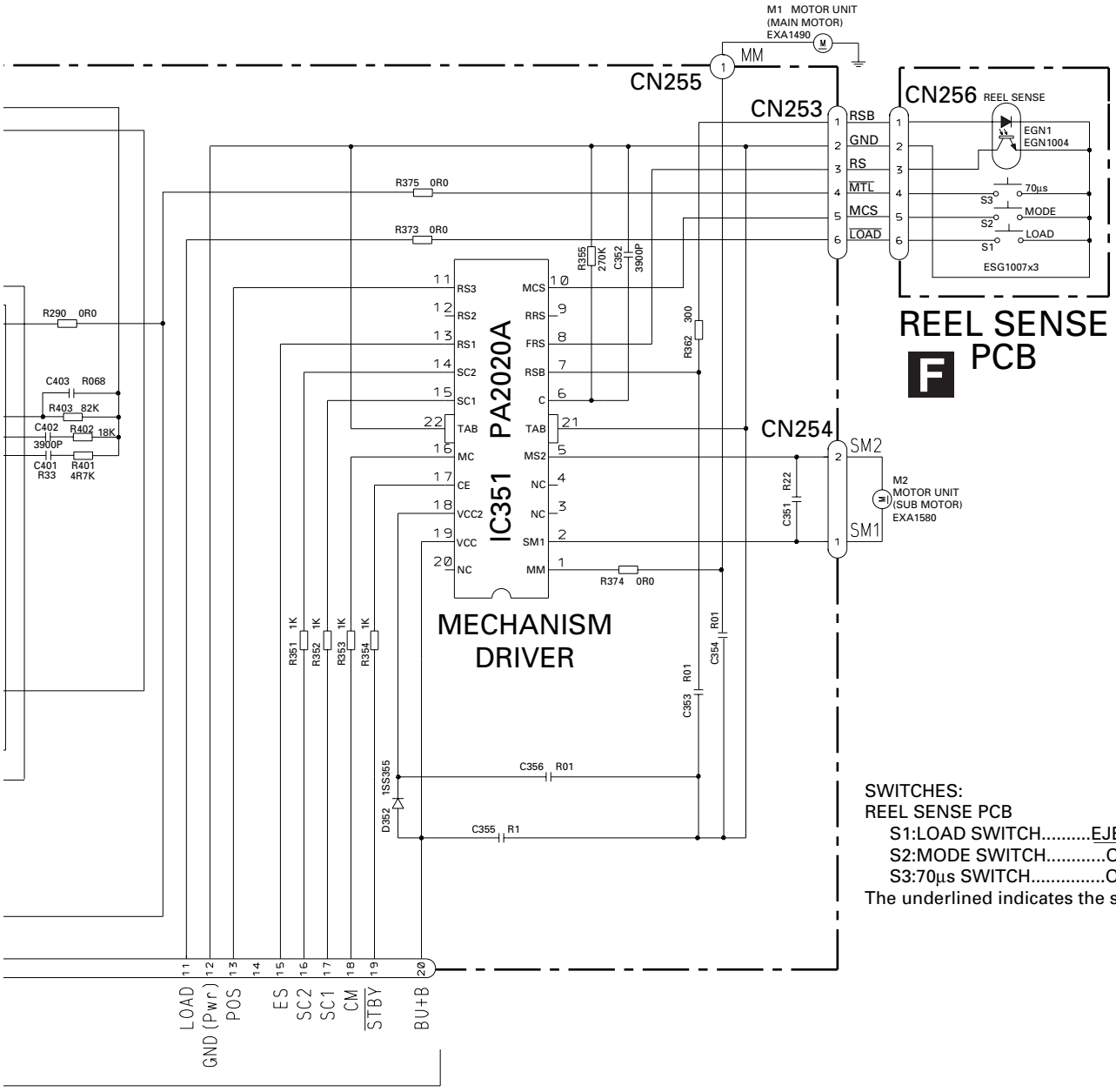
3.6 FM/AM TUNER UNIT(KEH-P6910R)




IC1
PML002A
IC2
PM4008A
IC3
BR9010FV
EEPROM
FM OSC
AM OSC
PLL
FM MPX
BUS CONTROL
FM NC
2ND IF (AM 450kHz)
COMP
CREQ
LDET
AMPNS
CE1
CK
DI/DO
SL
CE2
DGND
VDD
SDBW
WC
Lch
Rch
NL2
NL1
FMSD
STIND

3.7 CASSETTE MECHANISM MODULE





SWITCHES:
REEL SENSE PCB
S1:LOAD SWITCH.....EJECT-PLAY
S2:MODE SWITCH.....ON-OFF
S3:70µs SWITCH.....ON-OFF
The underlined indicates the switch position.

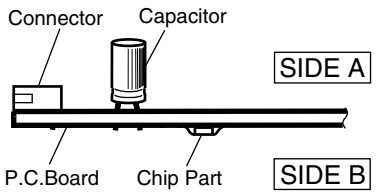
4. PCB CONNECTION DIAGRAM

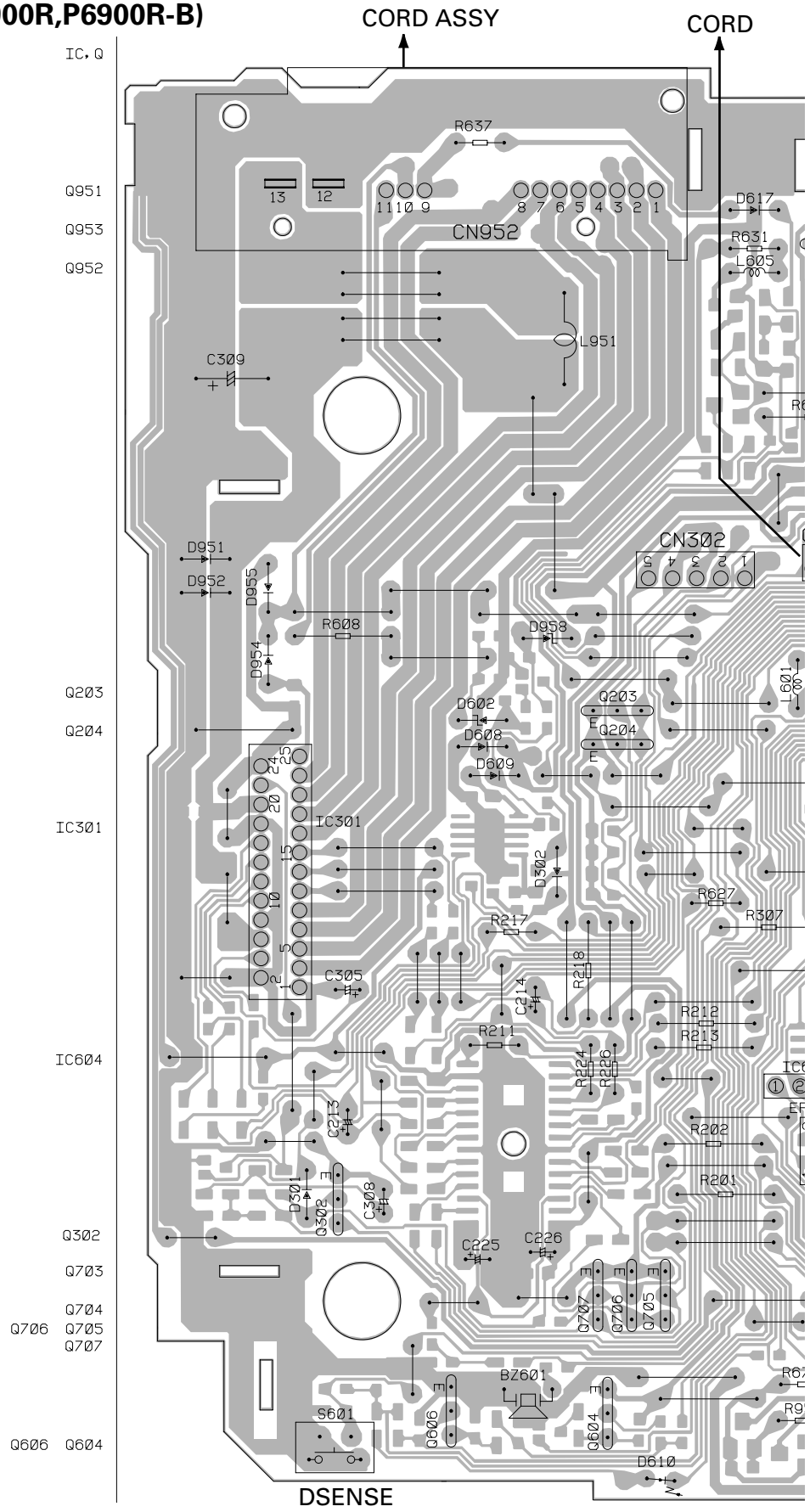
4.1 TUNER AMP UNIT(KEH-P6900R,P6900R-B)

A TUNER AMP UNIT

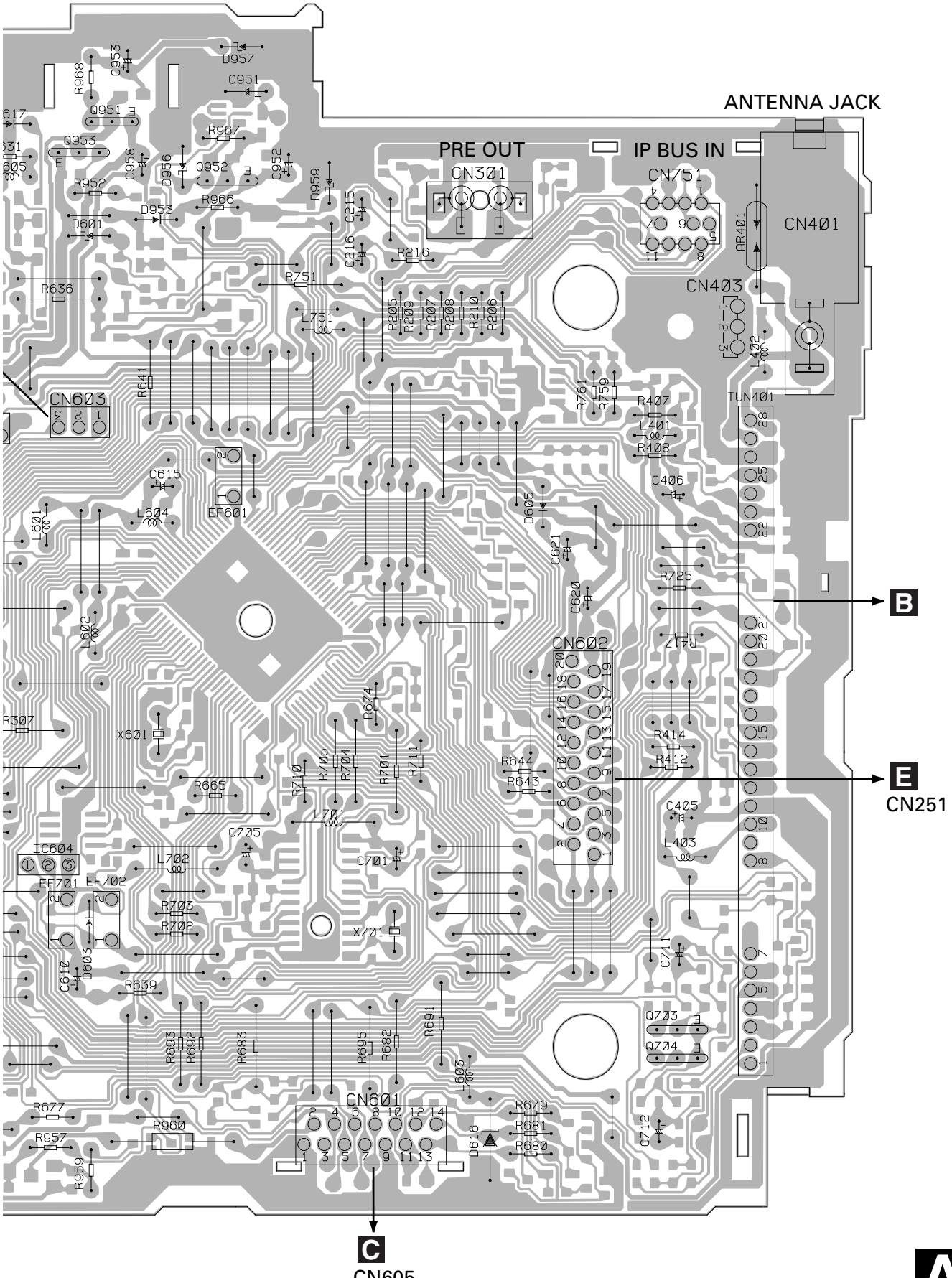
NOTE FOR PCB DIAGRAMS

1. The parts mounted on this PCB include all necessary parts for several destination.
   For further information for respective destinations, be sure to check with the schematic diagram.
2. Viewpoint of PCB diagrams

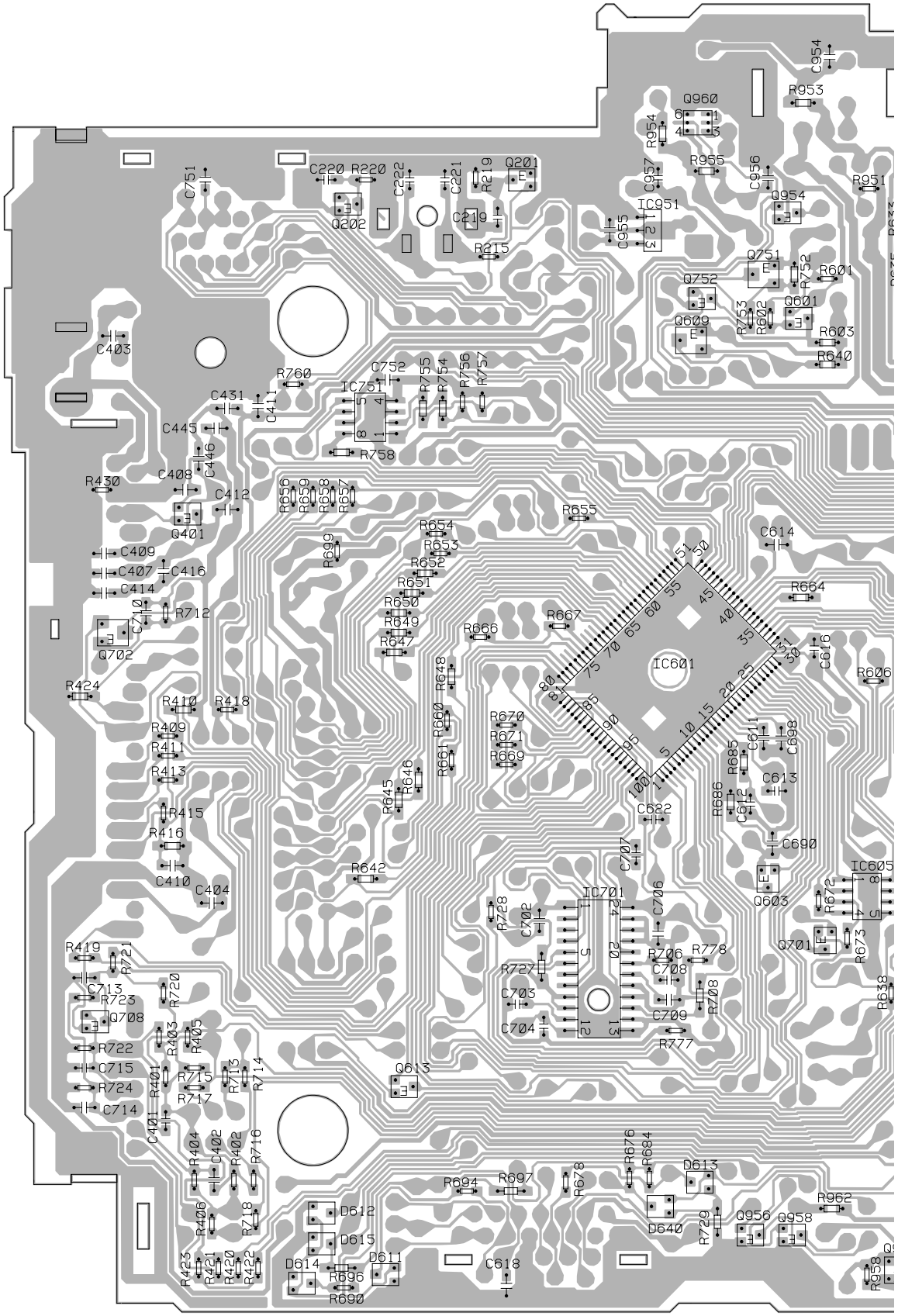




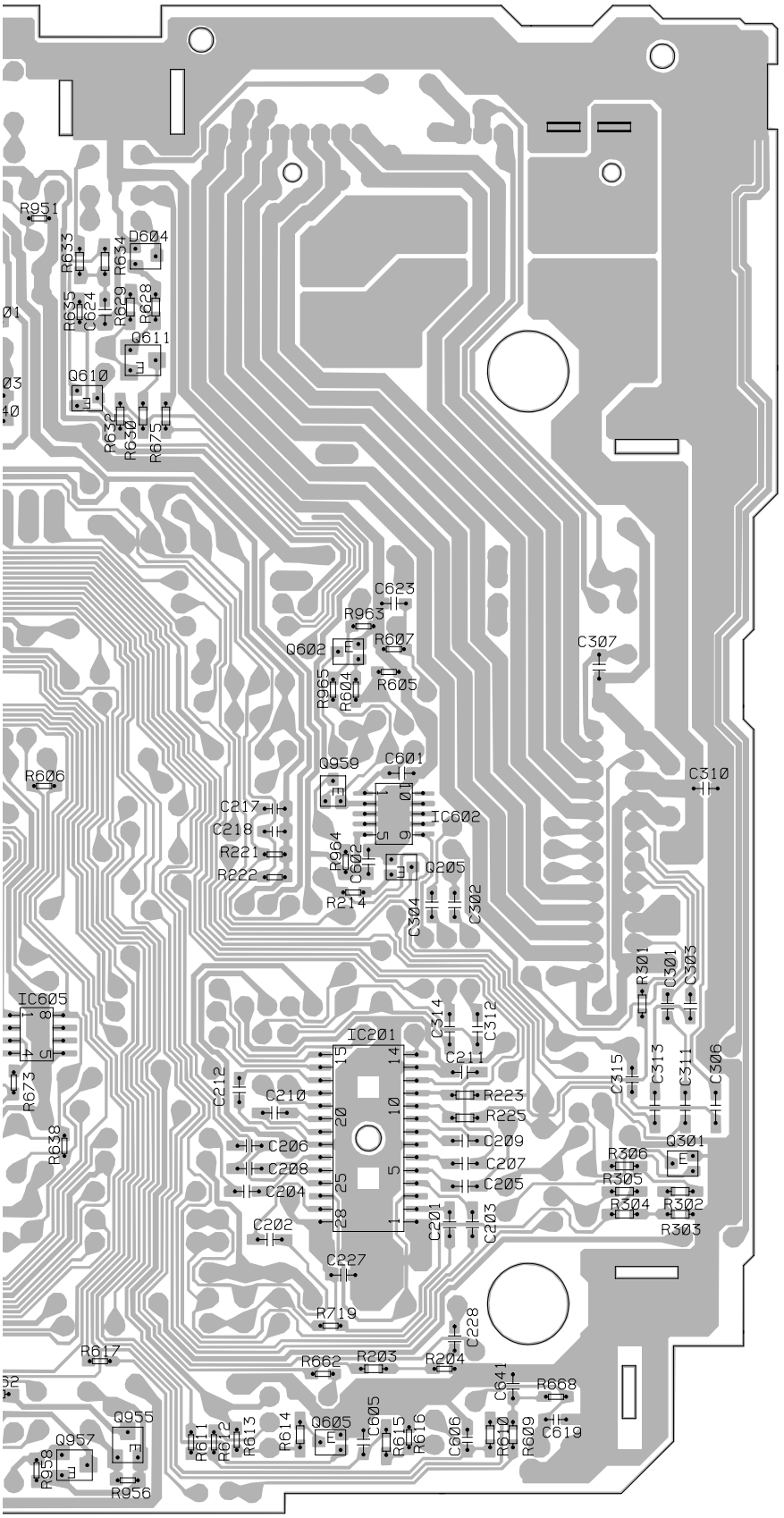
SIDE A


ANTENNA JACK
PRE OUT
IP BUS IN
CN301
CN751
CN401
CN403
CN603
CN602
CN601
TUN401
EF601
EF701
EF702
IC604
X601
X701
B
E
CN251
C
CN605

A TUNER AMP UNIT



SIDE B



IC, Q

A

Q960

Q201
Q954
IC951
Q202

Q751
Q752
Q601 Q611

Q609 Q610

IC751

B

Q401
Q602

Q702 Q959
IC601

IC602

Q205

C

IC605
IC701 IC201
Q603

Q701

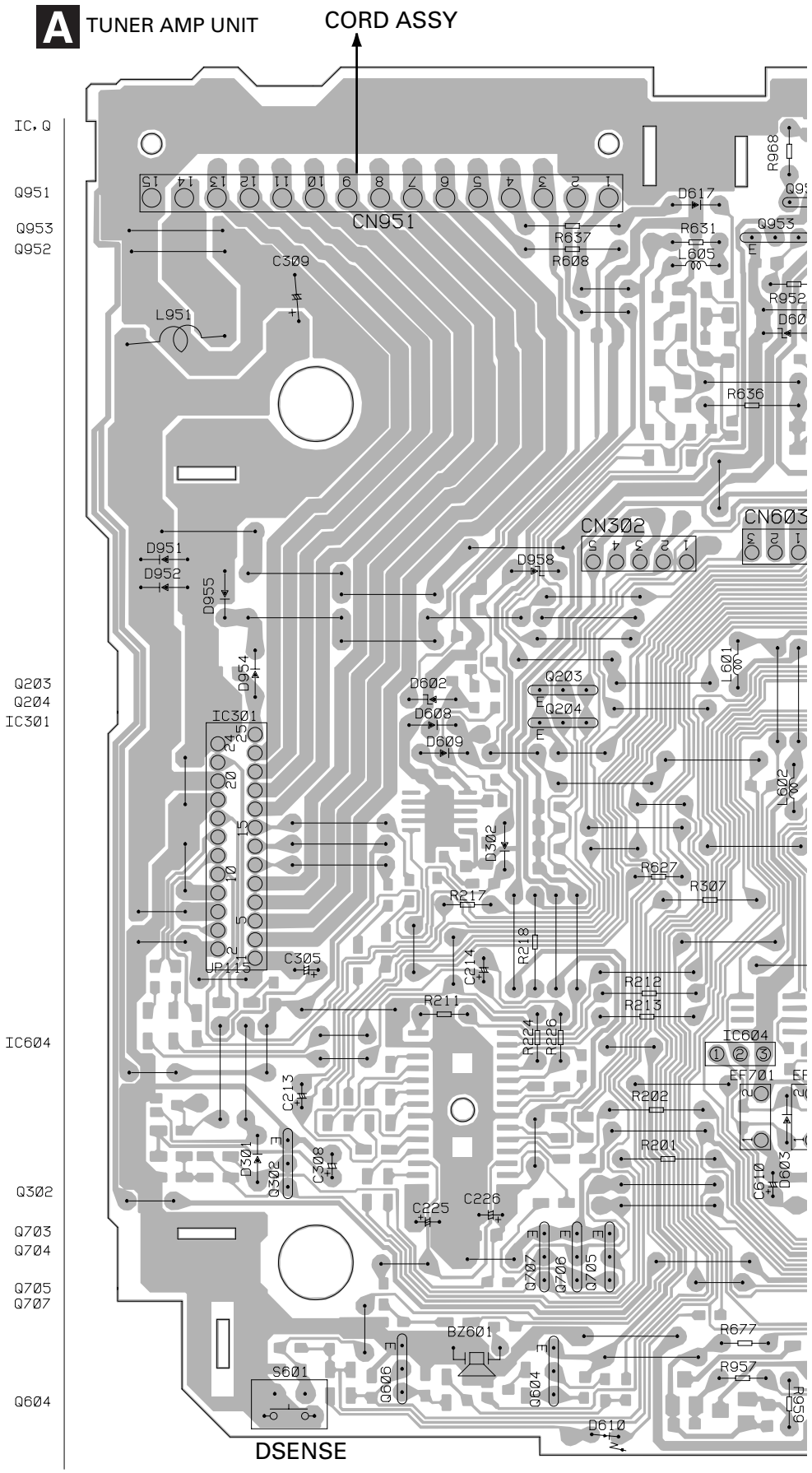
Q301
Q708

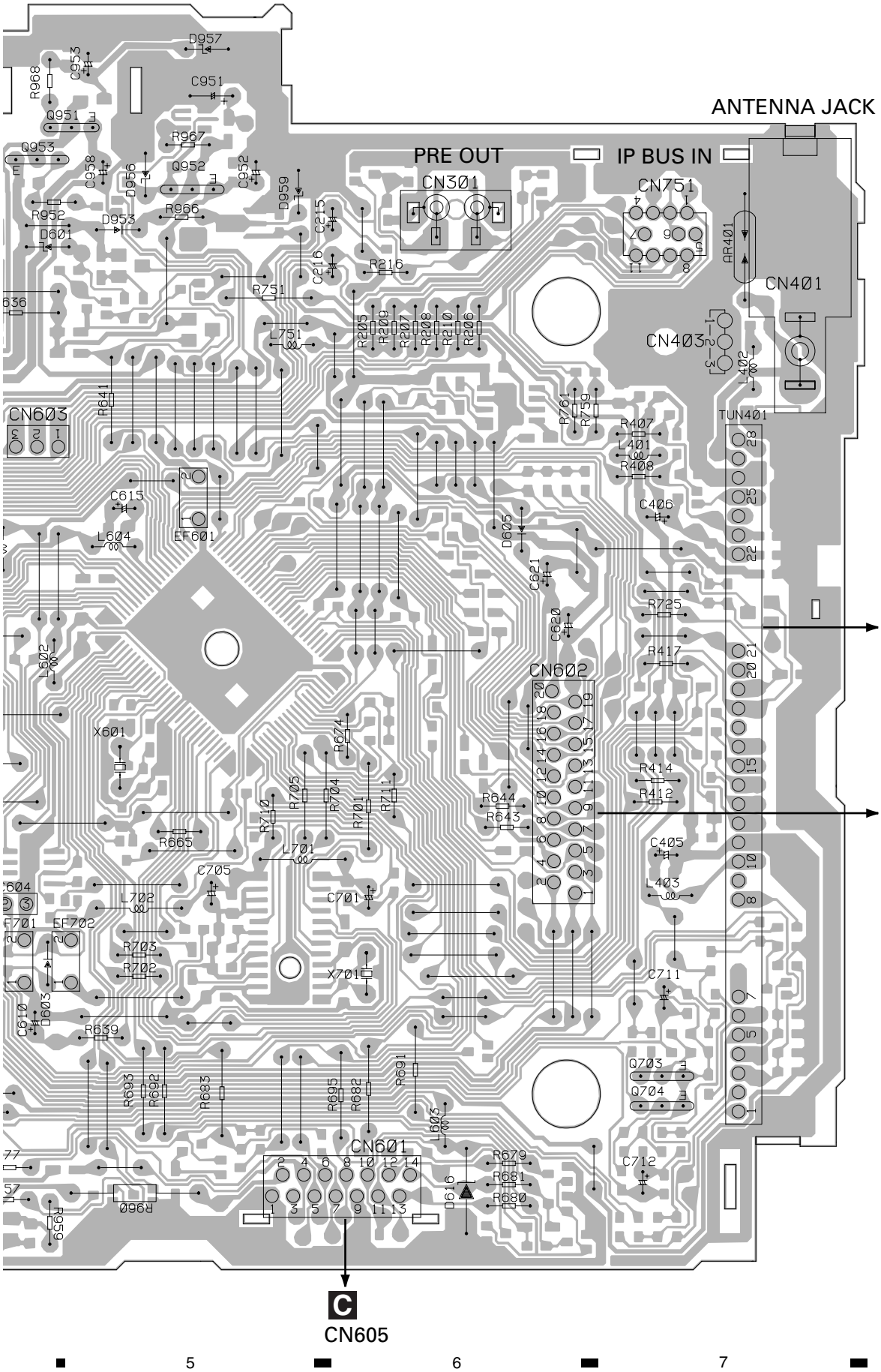
Q613

Q956
Q958 Q955
Q957 Q605

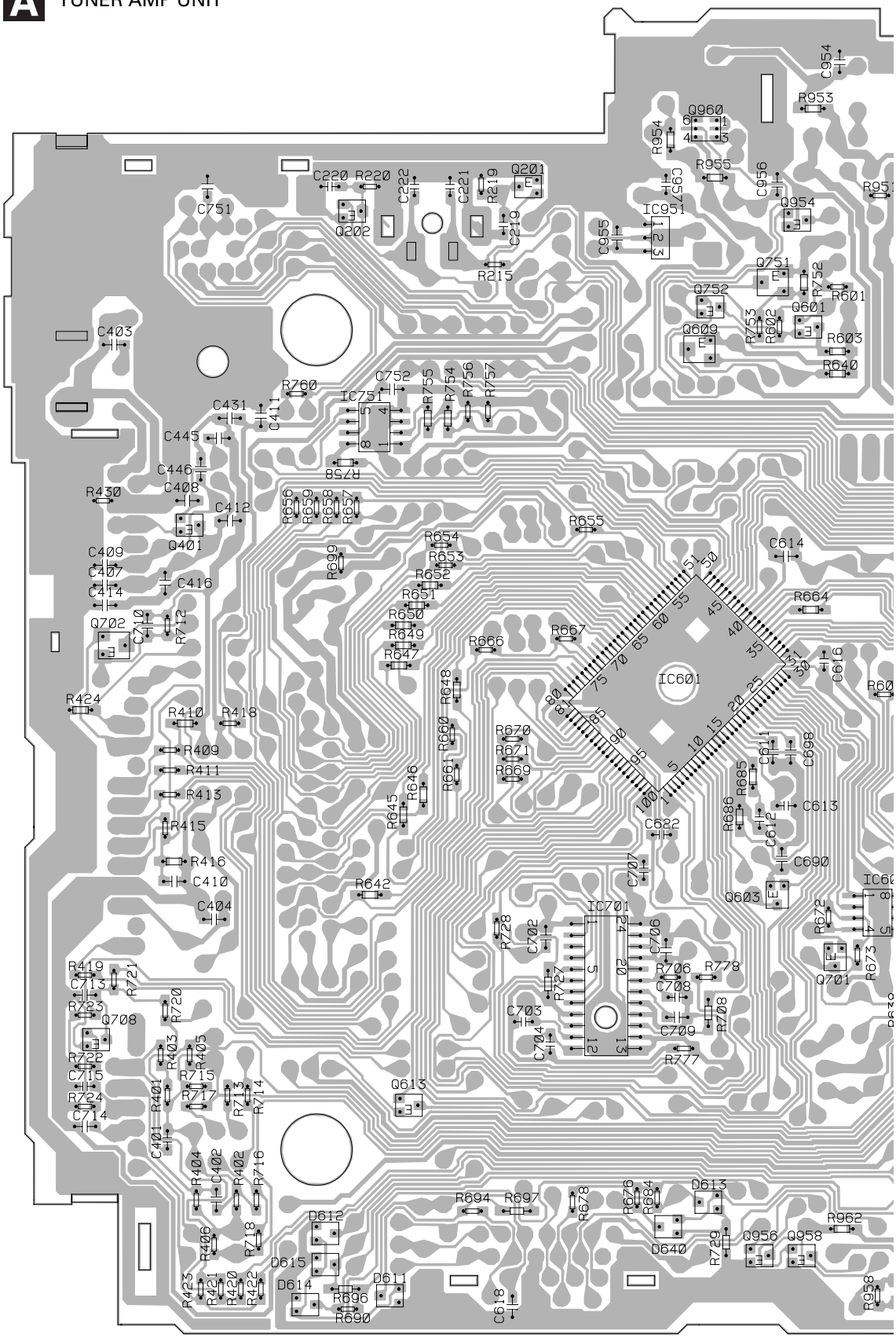
D

4.2 TUNER AMP UNIT(KEH-P6910R)

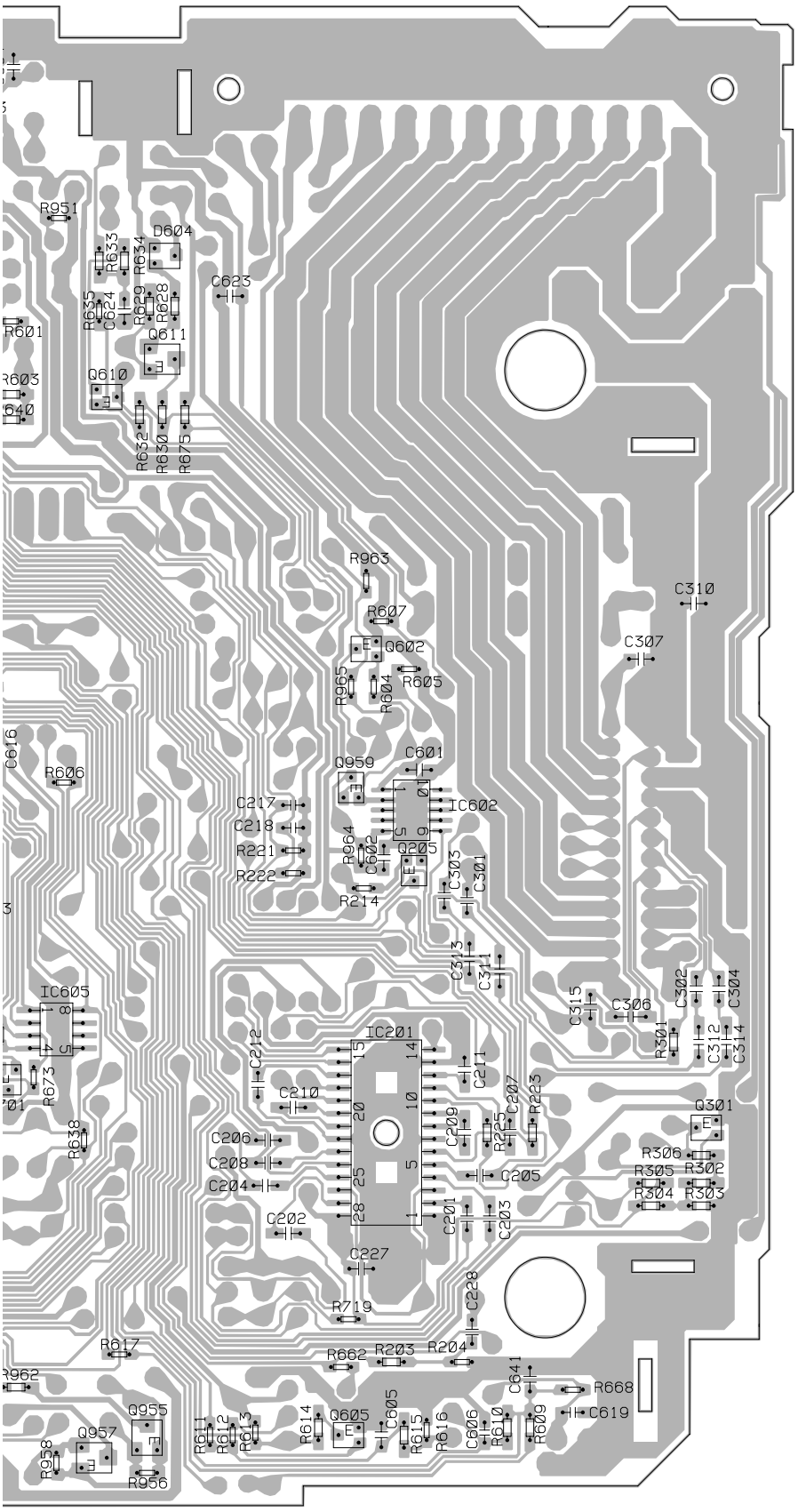



SIDE A
ANTENNA JACK
PRE OUT
IP BUS IN
CN3Ø1
CN751
CN4Ø1
CN403
CN6Ø3
CN6Ø2
CN6Ø1
TUN4Ø1
EF6Ø1
B
E
CN251
C
CN6Ø5

A TUNER AMP UNIT



SIDE B



IC, Q

A

Q960

Q201

IC951 Q954

Q202
Q751

Q752 Q611
Q601
Q609 Q610

IC751

B

Q401

Q602

Q702

Q959
IC601

IC602

Q205

IC605
IC701 Q603
IC201

C

Q701 Q301

Q708

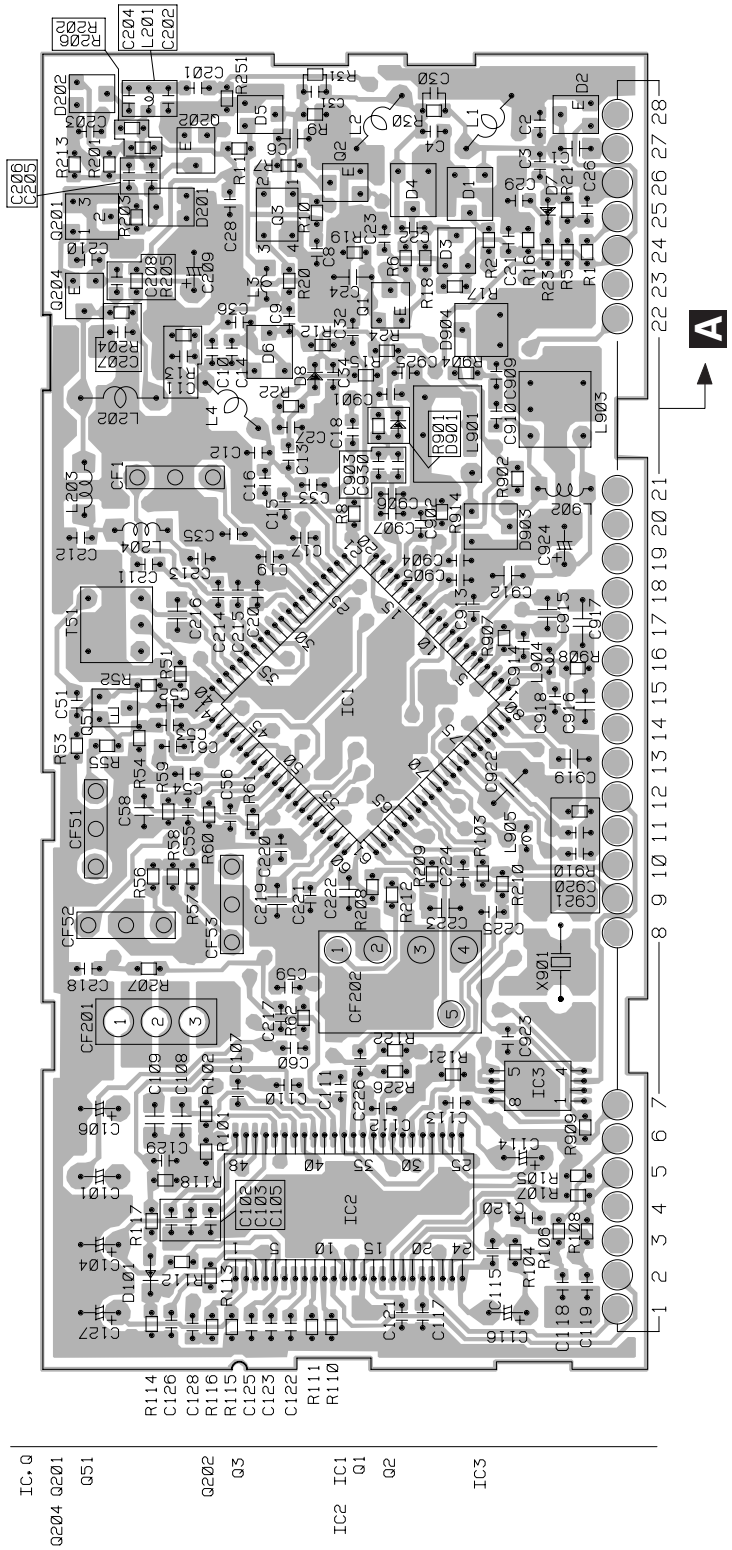
Q613

Q956 Q958
Q955 Q605
Q957

D

4.3 FM/AM TUNER UNIT

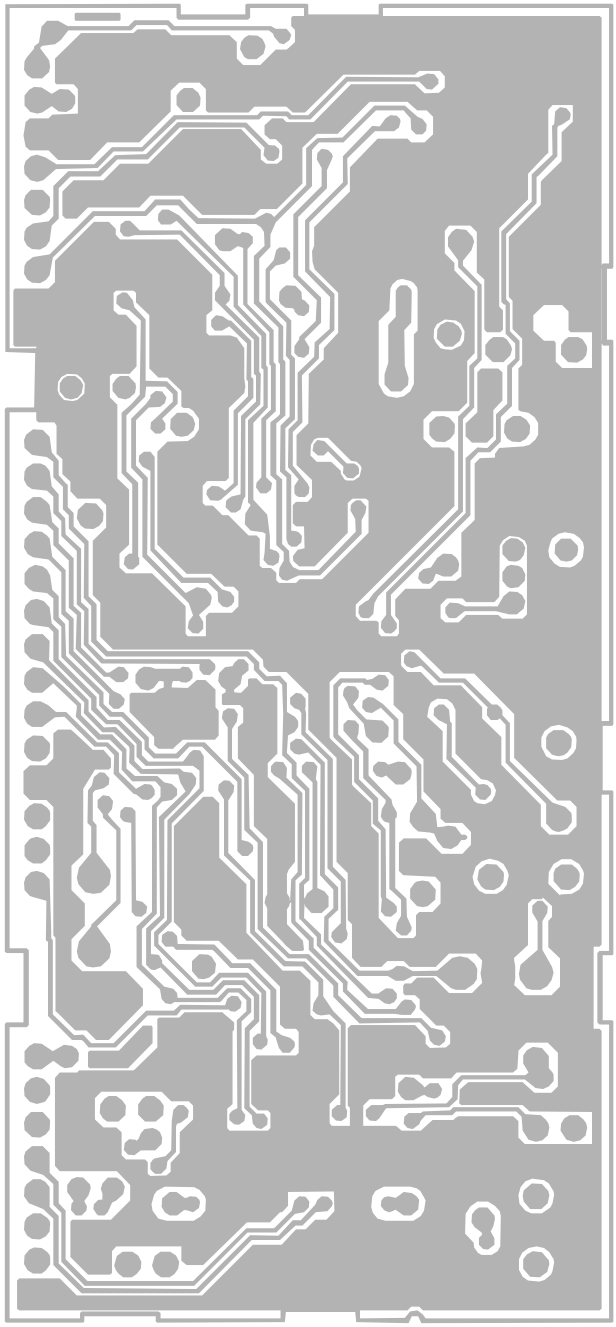
SIDE A



B FM/AM TUNER UNIT

B

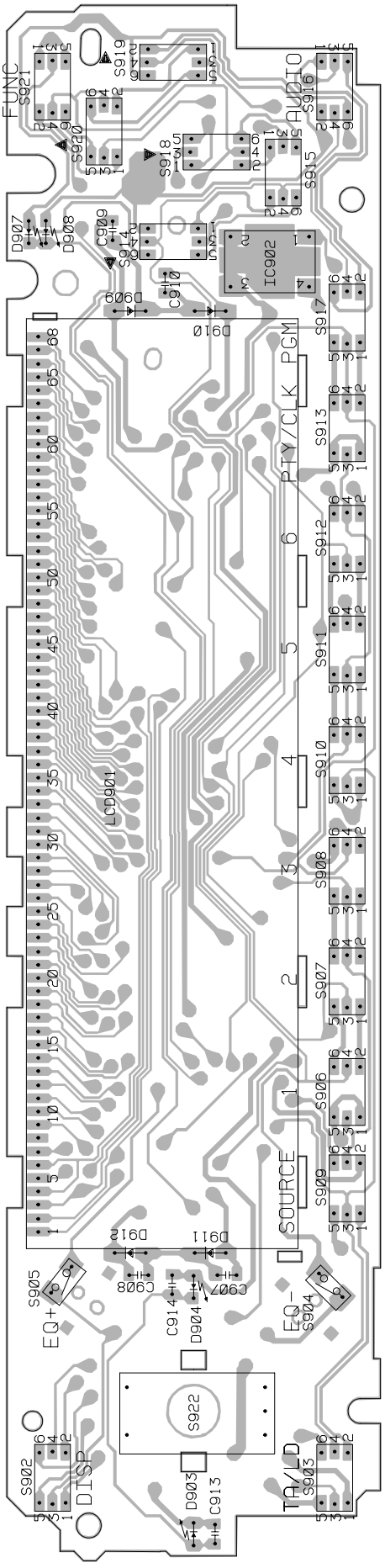
SIDE B



B FM/AM TUNER UNIT

4.4 KEYBOARD UNIT

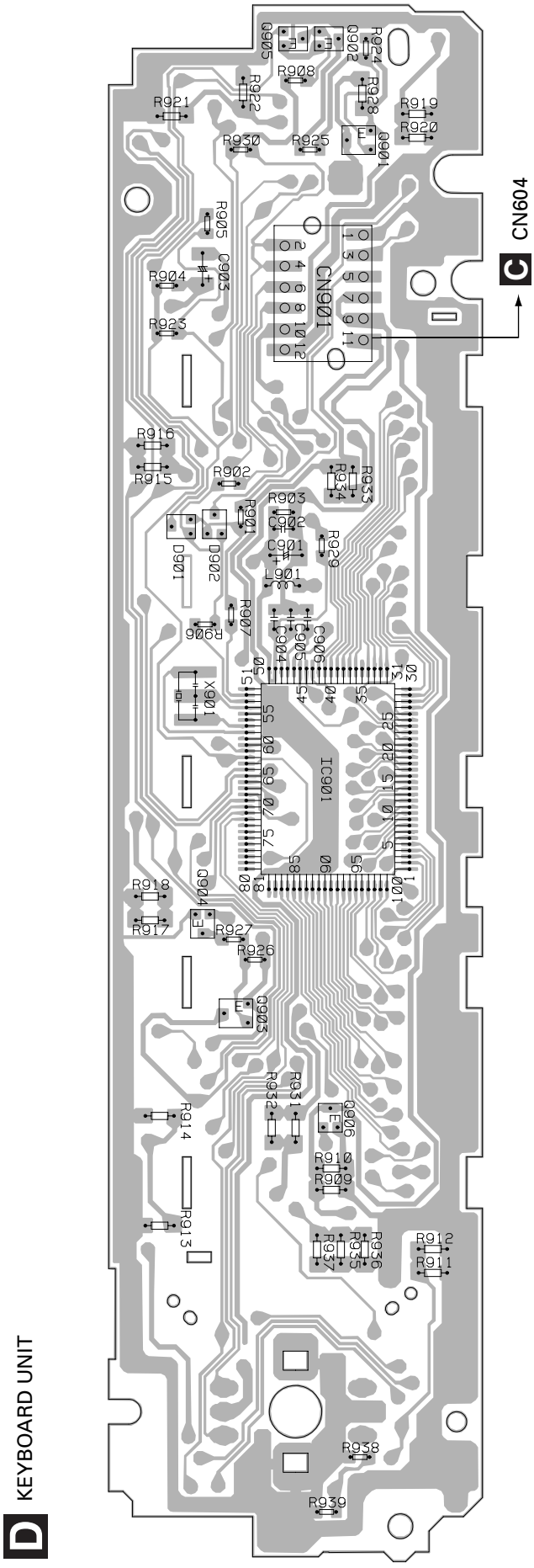
SIDE A



D KEYBOARD UNIT

IC, Q

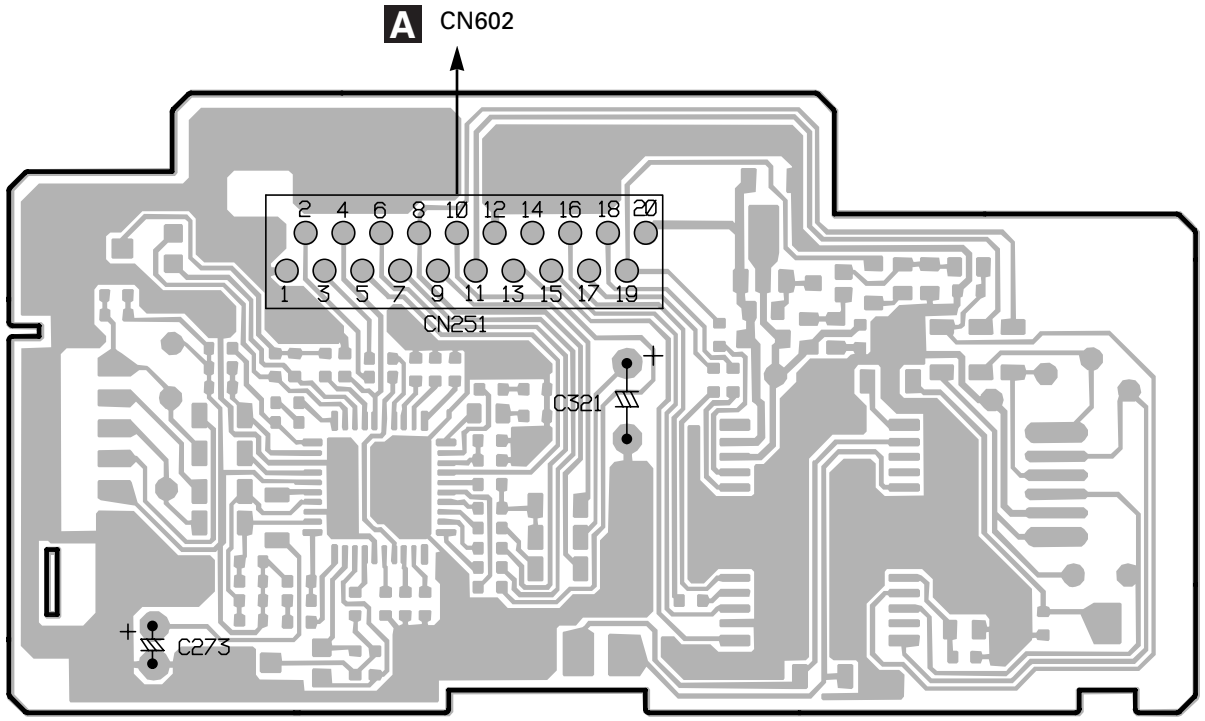
IC902


SIDE B
CN604
C
CN901
IC901
KEYBOARD UNIT
D
IC, Q
Q904
Q903
Q905
IC901
Q902
Q906
Q901

4.5 DECK UNIT,REEL SENSE PCB,PANEL PCB UNIT

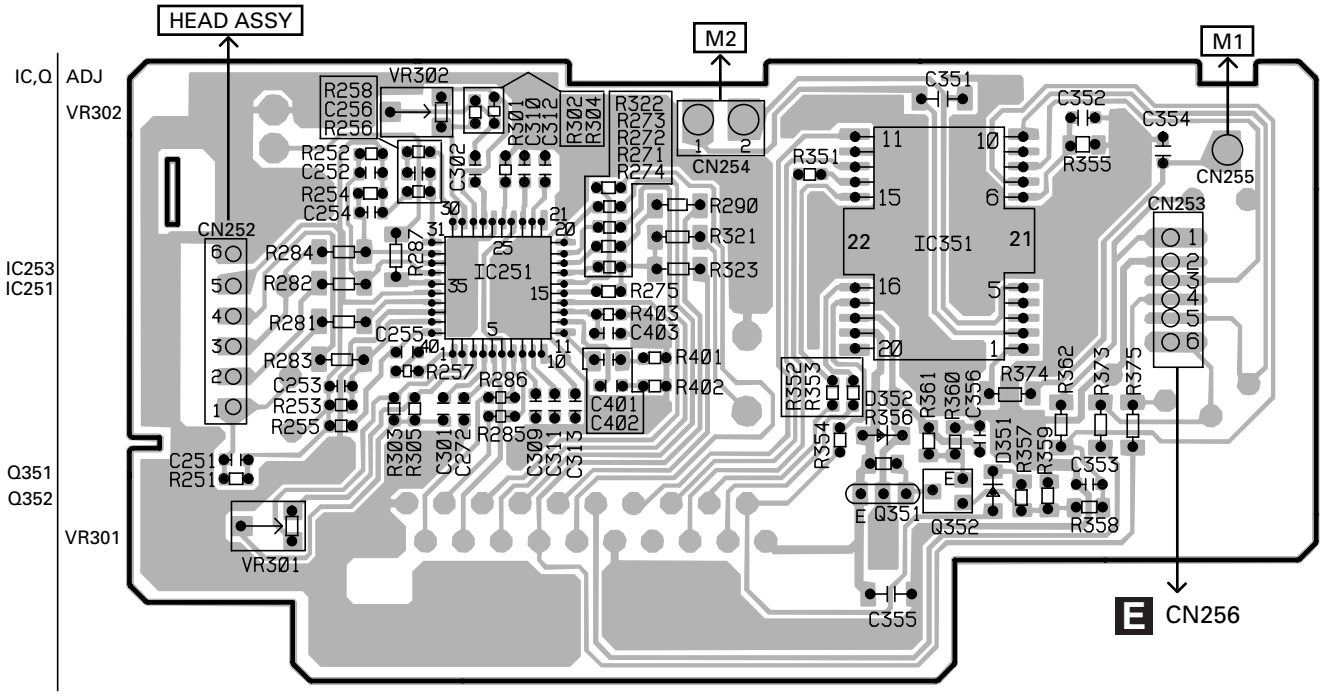
D DECK UNIT

SIDE A

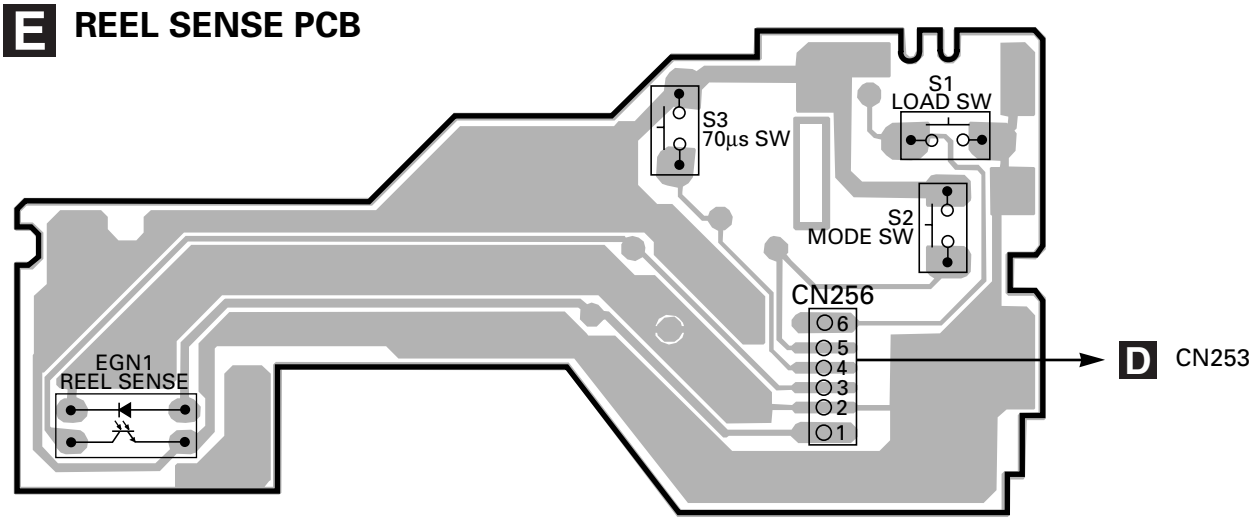


D DECK UNIT

SIDE B

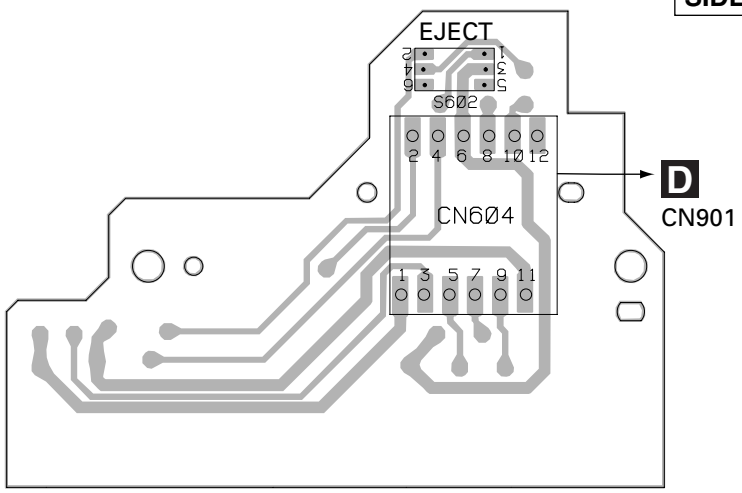


E REEL SENSE PCB



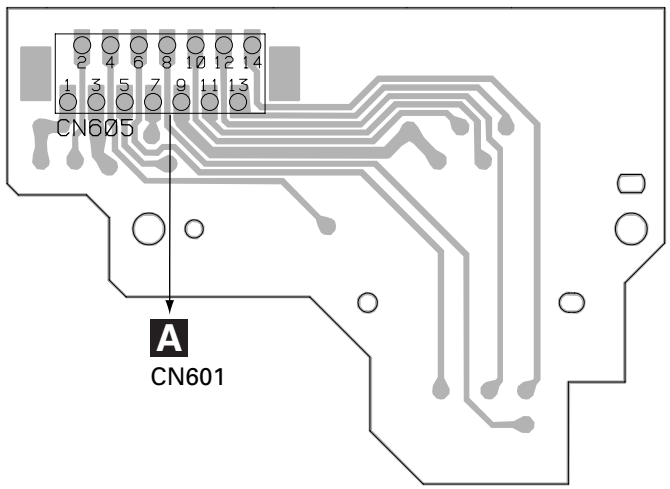
C PANEL PCB UNIT

SIDE A



C PANEL PCB UNIT

SIDE B



5. ELECTRICAL PARTS LIST

NOTES:

● Parts whose parts numbers are omitted are subject to being not supplied.

● The part numbers shown below indicate chip components.

Chip Resistor

RS1/○S○○○J,RS1/○○S○○○J

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

B Unit Number : CWE1500
: (KEH-P6900R,P6900R-B)
Unit Name : FM/AM Tuner Unit

MISCELLANEOUS

Circuit Symbol	No.	Part Name	Part No.
IC	1	IC	PML002A
IC	2	IC	PM4008A
IC	3	IC	BR9010FV
Q	1	Transistor	2SC4081
Q	2	Transistor	DTC124EU
Q	3	FET	3SK263
Q	51	Transistor	2SC4081
Q	201	FET	2SK932
Q	202	Transistor	DTC124EU
Q	204	Transistor	2SC4081
D	1	Diode	KV1410(23)
D	2	Diode	1SV248
D	4	Diode	KV1410(23)
D	6	Diode	KV1410(23)
D	101	Diode	1SS355
D	201	Diode	DAN217U
D	202	Diode	DAN217U
D	903	Diode	KV1410(23)
D	904	Diode	SVC253
L	1	Coil	CTC1155
L	2	Coil	CTC1155
L	3	Inductor	LCTB100K2125
L	4	Coil	CTC1155
L	201	Inductor	LCTB330M1608
L	202	Inductor	CTF1287
L	203	Inductor	LCTA121J3225
L	901	Coil	CTC1154
L	902	Inductor	LCTA3R3J3225
L	904	Inductor	LCTBR47M1608
L	905	Inductor	LCTBR47M1608
T	51	Coil	CTE1132
CF	51	Ceramic Filter	CTF1442
CF	52	Ceramic Filter	CTF1442
CF	53	Ceramic Filter	CTF1442
CF	202	Ceramic Filter	CTF1348
X	901	Crystal Resonator 10.250MHz	CSS1432

RESISTORS

Circuit Symbol	No.	Part No.
R	1	RS1/16S153J
R	2	RS1/16S103J
R	6	RS1/16S103J
R	7	RS1/16S273J
R	8	RS1/16S473J
R	9	RS1/16S223J
R	10	RS1/16S473J
R	11	RS1/16S221J
R	12	RS1/16S103J
R	13	RS1/16S104J
R	16	RS1/16S223J
R	17	RS1/16S221J
R	18	RS1/16S221J
R	19	RS1/16S473J
R	20	RS1/16S470J
R	51	RS1/16S470J
R	52	RS1/16S103J
R	53	RS1/16S103J
R	54	RS1/16S331J
R	55	RS1/16S331J
R	56	RS1/16S560J
R	57	RS1/16S560J
R	58	RS1/16S102J
R	59	RS1/16S225J
R	60	RS1/16S133J
R	61	RS1/16S433J
R	62	RS1/16S562J
R	101	RS1/16S333J
R	102	RS1/16S103J
R	103	RS1/16S333J
R	104	RS1/16S562J
R	106	RS1/16S0R0J
R	108	RS1/16S0R0J
R	110	RS1/16S154J
R	111	RS1/16S273J
R	112	RS1/16S223J
R	113	RS1/16S222J
R	114	RS1/16S333J
R	115	RS1/16S334J
R	116	RS1/16S473J
R	117	RS1/16S333J
R	118	RS1/16S223J
R	122	RS1/16S0R0J
R	202	RS1/16S472J
R	203	RS1/16S225J
R	204	RS1/16S102J
R	205	RS1/16S220J
R	206	RS1/16S471J
R	208	RS1/16S104J
R	209	RS1/16S104J
R	210	RS1/16S563J
R	213	RS1/16S223J
R	251	RS1/16S225J
R	902	RS1/16S103J
R	904	RS1/16S473J
R	907	RS1/16S103J
R	908	RS1/16S681J
R	909	RS1/16S473J
R	914	RS1/16S562J

CAPACITORS

Circuit Symbol	No.	Part No.
C	1	CCSQCH5R0C50
C	2	CCSRCH5R0C50
C	4	CCSRCJ3R0C50
C	6	CKSQYB105K10
C	8	CKSRYB222K50

=====Circuit Symbol and No.	===	Part Name	Part No.
C	10		CCSRCH220J50
C	11		CCSRCH150J50
C	12		CCSRCH8R0D50
C	14		CCSRCJ3R0C50
C	15		CKSRYB103K50
C	16		CKSRYB222K50
C	17		CKSRYB222K50
C	18		CCSRCJ3R0C50
C	19		CKSRYB103K50
C	20		CKSRYB103K50
C	21		CKSRYB103K50
C	24		CKSQYB334K16
C	31		CKSRYB222K50
C	32		CCSRCH470J50
C	35		CKSRYB103K50
C	51		CKSRYB103K50
C	52		CKSRYB473K16
C	53		CCSRCK2R0C50
C	54		CKSRYB103K50
C	55		CKSRYB104K16
C	56		CKSRYB104K16
C	58		CKSQYB224K16
C	59		CKSRYB223K25
C	60		CKSRYB104K16
C	101		CEALNP100M10
C	102		CCSRCH151J50
C	103		CKSRYB473K16
C	105		CKSRYB682K25
C	106		CEAL2R2M50
C	107		CKSRYB103K50
C	108		CKSQYB474K16
C	109		CKSQYB474K16
C	110		CKSRYB104K16
C	111		CKSRYB104K16
C	112		CKSRYB104K16
C	113		CKSRYB123K25
C	114		CEAL220M6R3
C	115		CKSRYB473K16
C	116		CEAL2R2M50
C	117		CKSRYB102K50
C	120		CKSRYB153K25
C	121		CKSRYB332K50
C	122		CKSRYB682K25
C	123		CKSRYB681K50
C	125		CKSRYB103K50
C	126		CKSRYB103K50
C	127		CEAL2R2M50
C	128		CKSRYB103K50
C	201		CCSRCH471J50
C	202		CCSRCH100D50
C	203		CKSRYB104K16
C	204		CKSRYB332K50
C	205		CKSRYB103K50
C	206		CKSRYB104K16
C	207		CKSRYB473K16
C	208		CCSRCH560J50
C	209		CEAL470M6R3
C	210		CKSRYB103K50
C	211		CKSRYB103K50
C	212		CCSRCH101J50
C	215		CKSRYB223K25
C	216		CKSQYB334K16
C	217		CKSRYB103K50
C	219		CKSQYB105K10
C	220		CKSRYB104K16
C	221		CKSRYB473K16
C	222		CKSQYB334K16
C	223		CKSQYB474K16
C	224		CKSRYB104K16
C	225		CKSRYB272K50

=====Circuit Symbol and No.	===	Part Name	Part No.
C	226		CKSRYB682K25
C	902		CCSRCH270J50
C	904		CKSRYB223K25
C	905		CKSRYB103K50
C	906		CCSRTH100D50
C	907		CCSRTH150J50
C	909		CCSRTH100D50
C	910		CKSRYB332K50
C	912		CKSQYB474K16
C	913		CKSRYB223K25
C	914		CKSRYB682K25
C	915		CKSQYB223K25
C	916		CKSQYB474K16
C	917		CKSYB475K10
C	918		CKSRYB223K25
C	919		CKSQYB225K10
C	920		CCSRCH270J50
C	921		CCSRCH270J50
C	922		CKSYB105K16
C	923		CKSRYB103K50

B Unit Number : CWE1504(KEH-P6910R)
Unit Name : FM/AM Tuner Unit

MISCELLANEOUS

IC	1	IC	PML002A
IC	2	IC	PM4008A
IC	3	IC	BR9010FV
Q	1	Transistor	2SC4081
Q	2	Transistor	DTC124EU
Q	3	FET	3SK263
Q	51	Transistor	2SC4081
Q	201	FET	2SK932
Q	202	Transistor	DTC124EU
Q	204	Transistor	2SC4081
D	1	Diode	KV1410(23)
D	2	Diode	1SV248
D	6	Diode	KV1410(23)
D	7	Diode	1SS390
D	8	Diode	1SS390
D	101	Diode	1SS355
D	201	Diode	DAN217U
D	202	Diode	DAN217U
D	901	Diode	1SS390
D	903	Diode	KV1410(23)
D	904	Diode	SVC253
L	1	Coil	CTC1155
L	3	Inductor	LCTB1R5K2125
L	4	Coil	CTC1155
L	201	Inductor	LCTB330M1608
L	202	Inductor	CTF1287
L	203	Inductor	LCTA121J3225
L	901	Coil	CTC1154
L	902	Inductor	LCTA3R3J3225
L	904	Inductor	LCTBR47M1608
L	905	Inductor	LCTBR47M1608
T	51	Coil	CTE1132
CF	51	Ceramic Filter	CTF1442
CF	52	Ceramic Filter	CTF1442
CF	53	Ceramic Filter	CTF1442
CF	202	Ceramic Filter	CTF1348
X	901	Crystal Resonator 10.250MHz	CSS1432

RESISTORS

R	1	RS1/16S183J
R	2	RS1/16S103J
R	5	RS1/16S471J
R	7	RS1/16S273J
R	8	RS1/16S473J

Circuit Symbol and No.	Part Name	Part No.
R 9		RS1/16S223J
R 10		RS1/16S473J
R 11		RS1/16S221J
R 12		RS1/16S103J
R 13		RS1/16S0R0J
R 15		RS1/16S471J
R 16		RS1/16S223J
R 17		RS1/16S221J
R 18		RS1/16S221J
R 19		RS1/16S473J
R 20		RS1/16S470J
R 21		RS1/16S103J
R 22		RS1/16S103J
R 23		RS1/16S0R0J
R 24		RS1/16S471J
R 31		RS1/16S0R0J
R 51		RS1/16S470J
R 52		RS1/16S103J
R 53		RS1/16S103J
R 54		RS1/16S331J
R 55		RS1/16S331J
R 56		RS1/16S560J
R 57		RS1/16S560J
R 58		RS1/16S102J
R 59		RS1/16S225J
R 60		RS1/16S133J
R 61		RS1/16S433J
R 62		RS1/16S562J
R 101		RS1/16S333J
R 102		RS1/16S103J
R 103		RS1/16S333J
R 104		RS1/16S562J
R 106		RS1/16S0R0J
R 108		RS1/16S0R0J
R 110		RS1/16S154J
R 111		RS1/16S273J
R 112		RS1/16S223J
R 113		RS1/16S222J
R 114		RS1/16S333J
R 115		RS1/16S334J
R 116		RS1/16S473J
R 117		RS1/16S333J
R 118		RS1/16S223J
R 122		RS1/16S0R0J
R 202		RS1/16S472J
R 203		RS1/16S225J
R 204		RS1/16S102J
R 205		RS1/16S220J
R 206		RS1/16S471J
R 208		RS1/16S104J
R 209		RS1/16S104J
R 210		RS1/16S563J
R 213		RS1/16S223J
R 251		RS1/16S225J
R 901		RS1/16S472J
R 902		RS1/16S103J
R 904		RS1/16S473J
R 907		RS1/16S103J
R 908		RS1/16S681J
R 909		RS1/16S473J
R 910		RS1/16S0R0J

CAPACITORS

Circuit Symbol and No.	Part Name	Part No.
C 1		CCSQCH4R0C50
C 3		CCSRCH270J50
C 6		CKSQYB105K10
C 8		CKSRYB222K50
C 9		CCSRCH220J50
C 12		CCSRCH4R0C50
C 13		CCSRCH270J50
C 15		CKSRYB103K50
C 16		CCSRCH100D50
C 17		CKSRYB222K50
C 19		CKSRYB103K50
C 20		CKSRYB103K50
C 21		CKSRYB103K50
C 24		CKSQYB334K16
C 26		CKSRYB472K50
C 27		CKSRYB472K50
C 29		CKSRYB472K50
C 30		CCSRCH120J50
C 33		CCSRCK1R0C50
C 34		CKSRYB472K50
C 35		CKSRYB103K50
C 51		CKSRYB103K50
C 52		CKSRYB473K16
C 53		CCSRCK2R0C50
C 54		CKSRYB103K50
C 55		CKSRYB104K16
C 56		CKSRYB104K16
C 58		CKSQYB224K16
C 59		CKSRYB223K25
C 60		CKSRYB104K16
C 101		CEALNP100M10
C 102		CCSRCH151J50
C 103		CKSRYB473K16
C 105		CKSRYB682K25
C 106		CEAL2R2M50
C 107		CKSRYB103K50
C 108		CKSQYB474K16
C 109		CKSQYB474K16
C 110		CKSRYB104K16
C 111		CKSRYB104K16
C 112		CKSRYB104K16
C 113		CKSRYB123K25
C 114		CEAL220M6R3
C 115		CKSRYB473K16
C 116		CEAL2R2M50
C 117		CKSRYB102K50
C 120		CKSRYB153K25
C 121		CKSRYB332K50
C 122		CKSRYB682K25
C 123		CKSRYB681K50
C 125		CKSRYB103K50
C 126		CKSRYB103K50
C 127		CEAL2R2M50
C 128		CKSRYB103K50
C 201		CCSRCH471J50
C 202		CCSRCH100D50
C 203		CKSRYB104K16
C 204		CKSRYB332K50
C 205		CKSRYB103K50
C 206		CKSRYB104K16
C 207		CKSRYB473K16
C 208		CCSRCH560J50
C 209		CEAL470M6R3
C 210		CKSRYB103K50
C 211		CKSRYB103K50
C 212		CCSRCH101J50
C 215		CKSRYB223K25
C 216		CKSQYB334K16
C 217		CKSRYB103K50
C 219		CKSQYB105K10
C 220		CKSRYB104K16
C 221		CKSRYB473K16
C 222		CKSQYB334K16
C 223		CKSQYB474K16
C 224		CKSRYB104K16

=====Circuit Symbol and No.		===Part Name	Part No.
C	225		CKSRYB272K50
C	226		CKSRYB682K25
C	902		CCSRCH560J50
C	903		CCSRCH270J50
C	904		CKSRYB223K25
C	905		CKSRYB103K50
C	906		CCSRTH8R0D50
C	907		CCSRTH8R0D50
C	909		CCSRTH100D50
C	910		CKSRYB332K50
C	912		CKSQYB474K16
C	913		CKSRYB223K25
C	914		CKSRYB682K25
C	915		CKSQYB223K25
C	916		CKSQYB474K16
C	917		CKSYB475K10
C	918		CKSRYB223K25
C	919		CKSQYB225K10
C	920		CCSRCH270J50
C	921		CCSRCH270J50
C	922		CKSYB105K16
C	923		CKSRYB103K50
C	925		CKSRYB472K50

A Unit Number : CWM6704(KEH-P6900R)
: CWM6705(KEH-P6900R-B)
Unit Name : Tuner Amp Unit

MISCELLANEOUS

IC	201	IC	PML003AM
IC	301	IC	PAL005A
IC	601	IC	PE5083A
IC	604	IC	S-80734AN
IC	701	IC	PM4009A
IC	751	IC	HA12187FP
IC	951	IC	S-81250PGPD
Q	201	Transistor	DTC143TU
Q	202	Transistor	DTC143TU
Q	205	Transistor	DTA124EU
Q	301	Transistor	DTC124EU
Q	302	Transistor	2SC1740S
Q	401	Transistor	2SC4081
Q	601	Transistor	2SC4081
Q	602	Transistor	2SC4081
Q	603	Transistor	DTA114EU
Q	609	Transistor	2SA1037K
Q	610	Transistor	2SC4081
Q	611	Transistor	2SA1037K
Q	613	Transistor	DTC143EU
Q	701	Transistor	DTA124EU
Q	702	Transistor	2SC2412K
Q	703	Transistor	2SD1468S
Q	704	Transistor	2SD1468S
Q	705	Transistor	DTC143TS
Q	706	Transistor	DTC143TS
Q	707	Transistor	DTC114ES
Q	708	Transistor	2SC4081
Q	751	Transistor	2SA1037K
Q	752	Transistor	DTC114EU
Q	951	Transistor	2SD2396
Q	952	Transistor	2SD1864
Q	953	Transistor	2SB1238
Q	954	Transistor	DTC114EU
Q	955	Transistor	2SA1037K
Q	956	Transistor	DTC114EU
Q	957	Transistor	2SB710A
Q	958	Transistor	DTC114EU
Q	959	Transistor	2SC4081
Q	960	Transistor	IMD2A

=====Circuit Symbol and No.		===Part Name	Part No.
D	301	Diode	1SS270
D	302	Diode	1SS270
D	601	Diode	HZS7L(C2)
D	602	Diode	HZS7L(A1)
D	603	Diode	1SS270
D	604	Diode	DAN202U
D	605	Diode	1SS270
D	611	Diode Network	DA204U
D	612	Diode Network	DA204U
D	613	Diode Network	DA204U
D	614	Diode Network	DA204U
D	615	Diode Network	DA204U
D	616	Diode	HZS7L(A1)
D	617	Diode	ERA15-02VH
D	640	Diode Network	DA204U
D	951	Diode	ERA15-02VH
D	952	Diode	ERA15-02VH
D	953	Diode	ERA15-02VH
D	954	Diode	ERA15-02VH
D	955	Diode	ERA15-02VH
D	956	Diode	HZS6L(B2)
D	957	Diode	HZS9L(B3)
D	958	Diode	HZS9L(A2)
D	959	Diode	HZS16(2)
L	401	Ferri-Inductor	LAU1R0M
L	402	Ferri-Inductor	LAU4R7K
L	403	Ferri-Inductor	LAU1R0M
L	601	Ferri-Inductor	LAU2R2M
L	602	Ferri-Inductor	LAU101K
L	603	Ferri-Inductor	LAU2R2M
L	604	Ferri-Inductor	LAU2R2M
L	605	Ferri-Inductor	LAU2R2M
L	701	Ferri-Inductor	LAU101K
L	702	Inductor	LAU100K
L	751	Ferri-Inductor	LAU2R2M
L	951	Coil 600µH	CTH1219
X	601	Radiator 12.58291MHz	CSS1402
X	701	Crystal Resonator 3.648MHz	CSS1447
S	601	Switch(DSENSE)	CSN1039
		FM/AM Tuner Unit	CWE1500
EF	601	Filter	CTF1071
EF	701	Filter	CTF1071
EF	702	Filter	CTF1071
BZ	601	Buzzer	CPV1050
AR	401		DSP-201M

RESISTORS

R	201	RD1/4PU102J
R	202	RD1/4PU102J
R	205	RD1/4PU821J
R	206	RD1/4PU821J
R	207	RD1/4PU102J
R	208	RD1/4PU102J
R	209	RD1/4PU223J
R	210	RD1/4PU223J
R	211	RD1/4PU0R0J
R	212	RD1/4PU222J
R	213	RD1/4PU222J
R	214	RS1/10S562J
R	215	RS1/10S821J
R	216	RD1/4PU821J
R	219	RS1/10S473J
R	220	RS1/10S473J
R	223	RS1/10S0R0J
R	224	RD1/4PU0R0J
R	225	RS1/10S0R0J
R	226	RD1/4PU0R0J

=====Circuit Symbol and No.	===Part Name	Part No.
R 301		RS1/10S103J
R 302		RS1/10S221J
R 303		RS1/10S153J
R 304		RS1/10S103J
R 305		RS1/10S152J
R 306		RS1/10S101J
R 307		RD1/4PU223J
R 401		RS1/10S272J
R 402		RS1/10S272J
R 403		RS1/10S162J
R 404		RS1/10S162J
R 407		RD1/4PU222J
R 408		RD1/4PU222J
R 409		RS1/10S681J
R 410		RS1/10S473J
R 411		RS1/10S681J
R 412		RD1/4PU473J
R 413		RS1/10S681J
R 414		RD1/4PU472J
R 415		RS1/10S103J
R 416		RS1/10S393J
R 417		RD1/4PU681J
R 418		RS1/10S473J
R 419		RS1/10S102J
R 420		RS1/10S681J
R 421		RS1/10S473J
R 422		RS1/10S681J
R 423		RS1/10S473J
R 424		RS1/10S473J
R 601		RS1/10S473J
R 602		RS1/10S473J
R 603		RS1/10S104J
R 604		RS1/10S223J
R 605		RS1/10S473J
R 606		RS1/10S473J
R 607		RS1/10S472J
R 608		RD1/4PU102J
R 628		RS1/10S472J
R 629		RS1/10S472J
R 630		RS1/10S102J
R 631		RD1/4PU153J
R 632		RS1/10S104J
R 633		RS1/10S103J
R 634		RS1/10S103J
R 635		RS1/10S473J
R 636		RD1/4PU473J
R 637		RD1/4PU102J
R 638		RS1/10S822J
R 639		RD1/4PU102J
R 640		RS1/10S223J
R 641		RD1/4PU222J
R 642		RS1/10S222J
R 643		RD1/4PU103J
R 644		RD1/4PU222J
R 645		RS1/10S222J
R 646		RS1/10S222J
R 647		RS1/10S103J
R 648		RS1/10S222J
R 649		RS1/10S222J
R 650		RS1/10S222J
R 651		RS1/10S222J
R 652		RS1/10S222J
R 653		RS1/10S222J
R 654		RS1/10S222J
R 655		RS1/10S222J

=====Circuit Symbol and No.	===Part Name	Part No.
R 656		RS1/10S473J
R 657		RS1/10S473J
R 658		RS1/10S473J
R 659		RS1/10S473J
R 660		RS1/10S103J
R 661		RS1/10S392J
R 662		RS1/10S102J
R 664		RS1/10S222J
R 665		RD1/4PU473J
R 666		RS1/10S473J
R 667	(KEH-P6900R-B)	RS1/10S473J
R 668		RS1/10S473J
R 673		RS1/10S473J
R 674		RD1/4PU473J
R 675		RS1/10S0R0J
R 676		RS1/10S473J
R 677		RD1/4PU102J
R 678		RS1/10S222J
R 679		RD1/4PU222J
R 680		RD1/4PU102J
R 681		RD1/4PU102J
R 682		RD1/4PU102J
R 683		RD1/4PU222J
R 684		RS1/10S473J
R 685		RS1/10S102J
R 686		RS1/10S473J
R 690		RS1/10S473J
R 691		RD1/4PU222J
R 692		RD1/4PU222J
R 693		RD1/4PU222J
R 694		RS1/10S222J
R 695		RD1/4PU222J
R 696		RS1/8S473J
R 697		RS1/8S0R0J
R 699		RS1/10S0R0J
R 701		RD1/4PU102J
R 702		RD1/4PU102J
R 703		RD1/4PU102J
R 704		RD1/4PU681J
R 705		RD1/4PU0R0J
R 706		RS1/10S225J
R 708		RS1/8S102J
R 710		RD1/4PU473J
R 711		RD1/4PU681J
R 712		RS1/10S224J
R 713		RS1/10S224J
R 714		RS1/10S224J
R 715		RS1/10S223J
R 716		RS1/10S223J
R 717		RS1/10S222J
R 718		RS1/10S222J
R 719		RS1/10S103J
R 720		RS1/10S474J
R 721		RS1/10S681J
R 722		RS1/10S153J
R 723		RS1/10S681J
R 724		RS1/10S473J
R 725		RD1/4PU681J
R 728		RS1/10S0R0J
R 729		RS1/8S0R0J
R 751		RD1/4PU222J
R 752		RS1/10S223J
R 753		RS1/10S472J
R 754		RS1/10S102J
R 755		RS1/10S102J

Circuit Symbol and No.		Part Name	Part No.
R	756		RS1/10S473J
R	757		RS1/10S473J
R	758		RS1/10S102J
R	759		RD1/4PU101J
R	760		RS1/10S620J
R	761		RD1/4PU101J
R	777		RS1/10S0R0J
R	951		RS1/10S223J
R	952		RD1/4PU272J
R	953		RS1/10S122J
R	954		RS1/10S0R0J
R	955		RS1/10S103J
R	956		RS1/10S473J
R	957		RD1/4PU152J
R	958		RS1/10S473J
R	959		RD1/4PU272J
R	960		RS2PMF330J
R	962		RS1/10S1R0J
R	963		RS1/10S223J
R	964		RS1/10S472J
R	965		RS1/10S103J
R	966		RD1/4PU151J
R	967		RD1/4PU152J
R	968		RD1/4PU221J

CAPACITORS

Circuit Symbol and No.		Part Name	Part No.
C	201		CKSQYB224K16
C	202		CKSQYB224K16
C	203		CKSQYB224K16
C	204		CKSQYB224K16
C	205		CKSQYB105K16
C	206		CKSQYB105K16
C	207		CKSQYB105K16
C	208		CKSQYB105K16
C	209		CKSQYB105K16
C	210		CKSQYB105K16
C	211		CKSQYB153K50
C	212		CKSQYB153K50
C	215		CEAL2R2M50
C	216		CEAL2R2M50
C	219		CKSQYB221K50
C	220		CKSQYB221K50
C	221		CKSQYB221K50
C	222		CKSQYB221K50
C	225		CEAL100M16
C	226		CEJA470M10
C	227		CKSQYB104K50
C	301		CKSQYB474K16
C	302		CKSQYB474K16
C	303		CKSQYB474K16
C	304		CKSQYB474K16
C	305		CEHAS100M16
C	306		CKSYB225K16
C	307		CKSQYB103K50
C	308		CEJA330M10
C	309	4700µF/16V	CCH1361
C	310		CKSQYB104K50
C	311		CKSYB474K16
C	312		CKSYB474K16
C	313		CKSYB474K16
C	314		CKSYB474K16
C	315		CKSQYB225K10
C	401		CKSQYB123K50
C	402		CKSQYB123K50
C	403		CKSQYB103K50
C	404		CKSQYB473K50

Circuit Symbol and No.		Part Name	Part No.
C	405		CEJA101M6R3
C	406		CEJA220M10
C	408		CKSQYB223K50
C	409		CKSQYB223K50
C	410		CKSQYB472K50
C	411		CKSQYB103K50
C	412		CKSQYB103K50
C	416		CKSQYB473K50
C	610		CEAL2R2M50
C	611		CKSQYB104K50
C	612		CCSQCH200J50
C	613		CCSQCH200J50
C	614		CKSQYB103K50
C	615		CEAL4R7M35
C	616		CCSQCH101J50
C	619		CCSQCH101J50
C	620		CEJA100M16
C	621		CEJA220M10
C	623		CKSQYB102K50
C	624		CKSQYB105K16
C	641		CKSQYB103K50
C	690		CKSQYB473K50
C	698		CKSQYB473K50
C	701		CEJA220M6R3
C	702		CKSQYB104K50
C	703		CCSQCH270J50
C	704		CCSQCH270J50
C	705		CEJA220M6R3
C	706		CKSQYB104K50
C	707		CKSQYB471K50
C	708		CKSQYB471K50
C	709		CKSQYB104K50
C	710		CKSQYB223K50
C	711		CEAL2R2M50
C	712		CEAL2R2M50
C	713		CKSQYB472K50
C	714		CKSQYB182K50
C	751		CKSQYB104K50
C	752		CKSQYB102K50
C	951	470µF/16V	CCH1183
C	952		CEJA470M10
C	953		CEJA101M10
C	954		CKSQYB103K50
C	955		CKSQYB105K16
C	956		CKSQYB103K50
C	957		CCSQCH101J50
C	958		CEJA101M10

A Unit Number : CWM6706(KEH-P6910R)
Unit Name : Tuner Amp Unit

MISCELLANEOUS

Circuit Symbol and No.		Part Name	Part No.
IC	201	IC	PML003AM
IC	301	IC	PAL005A
IC	601	IC	PE5083A
IC	604	IC	S-80734AN
IC	701	IC	PM4009A
IC	751	IC	HA12187FP
IC	951	IC	S-81250PGPD
Q	201	Transistor	DTC143TU
Q	202	Transistor	DTC143TU
Q	205	Transistor	DTA124EU
Q	301	Transistor	DTC124EU
Q	302	Transistor	2SC1740S
Q	401	Transistor	2SC4081
Q	601	Transistor	2SC4081
Q	602	Transistor	2SC4081

Circuit Symbol and No.		Part Name	Part No.
Q	603	Transistor	DTA114EU
Q	609	Transistor	2SA1037K
Q	610	Transistor	2SC4081
Q	611	Transistor	2SA1037K
Q	613	Transistor	DTC143EU
Q	701	Transistor	DTA124EU
Q	702	Transistor	2SC2412K
Q	703	Transistor	2SD1468S
Q	704	Transistor	2SD1468S
Q	705	Transistor	DTC143TS
Q	706	Transistor	DTC143TS
Q	707	Transistor	DTC114ES
Q	708	Transistor	2SC4081
Q	751	Transistor	2SA1037K
Q	752	Transistor	DTC114EU
Q	951	Transistor	2SD2396
Q	952	Transistor	2SD1864
Q	953	Transistor	2SB1238
Q	954	Transistor	DTC114EU
Q	955	Transistor	2SA1037K
Q	956	Transistor	DTC114EU
Q	957	Transistor	2SB710A
Q	958	Transistor	DTC114EU
Q	959	Transistor	2SC4081
Q	960	Transistor	IMD2A
D	301	Diode	1SS270
D	302	Diode	1SS270
D	601	Diode	HZS7L(C2)
D	602	Diode	HZS7L(A1)
D	603	Diode	1SS270
D	604	Diode	DAN202U
D	605	Diode	1SS270
D	611	Diode Network	DA204U
D	612	Diode Network	DA204U
D	613	Diode Network	DA204U
D	614	Diode Network	DA204U
D	615	Diode Network	DA204U
D	616	Diode	HZS7L(A1)
D	617	Diode	ERA15-02VH
D	640	Diode Network	DA204U
D	951	Diode	ERA15-02VH
D	952	Diode	ERA15-02VH
D	953	Diode	ERA15-02VH
D	954	Diode	ERA15-02VH
D	955	Diode	ERA15-02VH
D	956	Diode	HZS6L(B2)
D	957	Diode	HZS9L(B3)
D	958	Diode	HZS9L(A2)
D	959	Diode	HZS16(2)
L	401	Ferri-Inductor	LAU1R0M
L	402	Ferri-Inductor	LAU4R7K
L	403	Ferri-Inductor	LAU1R0M
L	601	Ferri-Inductor	LAU2R2M
L	602	Ferri-Inductor	LAU101K
L	603	Ferri-Inductor	LAU2R2M
L	604	Ferri-Inductor	LAU2R2M
L	605	Ferri-Inductor	LAU2R2M
L	701	Ferri-Inductor	LAU101K
L	702	Inductor	LAU100K
L	751	Ferri-Inductor	LAU2R2M
L	951	Choke Coil 600µH	CTH1171
X	601	Radiator 12.58291MHz	CSS1402
X	701	Crystal Resonator 3.648MHz	CSS1447
S	601	Switch(DSENSE)	CSN1039
		FM/AM Tuner Unit	CWE1504
EF	601	Filter	CTF1071
EF	701	Filter	CTF1071
EF	702	Filter	CTF1071
BZ	601	Buzzer	CPV1050
AR	401		DSP-201M

RESISTORS

Circuit Symbol and No.		Part No.
R	201	RD1/4PU102J
R	202	RD1/4PU102J
R	205	RD1/4PU821J
R	206	RD1/4PU821J
R	207	RD1/4PU102J
R	208	RD1/4PU102J
R	209	RD1/4PU223J
R	210	RD1/4PU223J
R	211	RD1/4PU0R0J
R	212	RD1/4PU222J
R	213	RD1/4PU222J
R	214	RS1/10S562J
R	215	RS1/10S821J
R	216	RD1/4PU821J
R	219	RS1/10S473J
R	220	RS1/10S473J
R	223	RS1/10S0R0J
R	224	RD1/4PU0R0J
R	225	RS1/10S0R0J
R	226	RD1/4PU0R0J
R	301	RS1/10S103J
R	302	RS1/10S221J
R	303	RS1/10S153J
R	304	RS1/10S103J
R	305	RS1/10S152J
R	306	RS1/10S101J
R	307	RD1/4PU223J
R	401	RS1/10S272J
R	402	RS1/10S272J
R	403	RS1/10S162J
R	404	RS1/10S162J
R	407	RD1/4PU222J
R	408	RD1/4PU222J
R	409	RS1/10S681J
R	410	RS1/10S473J
R	411	RS1/10S681J
R	412	RD1/4PU473J
R	413	RS1/10S681J
R	414	RD1/4PU472J
R	415	RS1/10S103J
R	416	RS1/10S393J
R	417	RD1/4PU681J
R	418	RS1/10S473J
R	419	RS1/10S102J
R	420	RS1/10S681J
R	421	RS1/10S473J
R	422	RS1/10S681J
R	423	RS1/10S473J
R	424	RS1/10S473J
R	601	RS1/10S473J
R	602	RS1/10S473J
R	603	RS1/10S104J
R	604	RS1/10S223J
R	605	RS1/10S473J
R	606	RS1/10S473J
R	607	RS1/10S472J
R	608	RD1/4PU102J
R	628	RS1/10S472J
R	629	RS1/10S472J
R	630	RS1/10S102J
R	631	RD1/4PU153J
R	632	RS1/10S104J
R	633	RS1/10S103J
R	634	RS1/10S103J
R	635	RS1/10S473J

Circuit Symbol and No.	Part Name	Part No.
R 636		RD1/4PU473J
R 637		RD1/4PU102J
R 638		RS1/10S822J
R 639		RD1/4PU102J
R 640		RS1/10S223J
R 641		RD1/4PU222J
R 642		RS1/10S222J
R 643		RD1/4PU103J
R 644		RD1/4PU222J
R 645		RS1/10S222J
R 646		RS1/10S222J
R 647		RS1/10S103J
R 648		RS1/10S222J
R 649		RS1/10S222J
R 650		RS1/10S222J
R 651		RS1/10S222J
R 652		RS1/10S222J
R 653		RS1/10S222J
R 654		RS1/10S222J
R 655		RS1/10S222J
R 656		RS1/10S473J
R 657		RS1/10S473J
R 658		RS1/10S473J
R 659		RS1/10S473J
R 660		RS1/10S103J
R 661		RS1/10S392J
R 662		RS1/10S102J
R 664		RS1/10S222J
R 665		RD1/4PU473J
R 667		RS1/10S473J
R 668		RS1/10S473J
R 673		RS1/10S473J
R 674		RD1/4PU473J
R 676		RS1/10S473J
R 677		RD1/4PU102J
R 678		RS1/10S222J
R 679		RD1/4PU222J
R 680		RD1/4PU102J
R 681		RD1/4PU102J
R 682		RD1/4PU102J
R 683		RD1/4PU222J
R 684		RS1/10S473J
R 685		RS1/10S102J
R 686		RS1/10S473J
R 690		RS1/10S473J
R 691		RD1/4PU222J
R 692		RD1/4PU222J
R 693		RD1/4PU222J
R 694		RS1/10S222J
R 695		RD1/4PU222J
R 696		RS1/8S473J
R 697		RS1/8S0R0J
R 699		RS1/10S0R0J
R 701		RD1/4PU102J
R 702		RD1/4PU102J
R 703		RD1/4PU102J
R 704		RD1/4PU681J
R 705		RD1/4PU0R0J
R 706		RS1/10S225J
R 708		RS1/8S102J
R 710		RD1/4PU473J
R 711		RD1/4PU681J
R 712		RS1/10S224J
R 713		RS1/10S224J
R 714		RS1/10S224J
R 715		RS1/10S223J
R 716		RS1/10S223J
R 717		RS1/10S222J
R 718		RS1/10S222J
R 719		RS1/10S103J
R 720		RS1/10S474J
R 721		RS1/10S681J
R 722		RS1/10S153J
R 723		RS1/10S681J
R 724		RS1/10S473J
R 725		RD1/4PU681J
R 728		RS1/10S0R0J
R 729		RS1/8S0R0J
R 751		RD1/4PU222J
R 752		RS1/10S223J
R 753		RS1/10S472J
R 754		RS1/10S102J
R 755		RS1/10S102J
R 756		RS1/10S473J
R 757		RS1/10S473J
R 758		RS1/10S102J
R 759		RD1/4PU101J
R 760		RS1/10S620J
R 761		RD1/4PU101J
R 777		RS1/10S0R0J
R 951		RS1/10S223J
R 952		RD1/4PU272J
R 953		RS1/10S122J
R 954		RS1/10S0R0J
R 955		RS1/10S103J
R 956		RS1/10S473J
R 957		RD1/4PU152J
R 958		RS1/10S473J
R 959		RD1/4PU272J
R 960		RS2PMF330J
R 962		RS1/10S1R0J
R 963		RS1/10S223J
R 964		RS1/10S472J
R 965		RS1/10S103J
R 966		RD1/4PU151J
R 967		RD1/4PU152J
R 968		RD1/4PU221J

CAPACITORS

Circuit Symbol and No.	Part Name	Part No.
C 201		CKSQYB224K16
C 202		CKSQYB224K16
C 203		CKSQYB224K16
C 204		CKSQYB224K16
C 205		CKSQYB105K16
C 206		CKSQYB105K16
C 207		CKSQYB105K16
C 208		CKSQYB105K16
C 209		CKSQYB105K16
C 210		CKSQYB105K16
C 211		CKSQYB153K50
C 212		CKSQYB153K50
C 215		CEAL2R2M50
C 216		CEAL2R2M50
C 219		CKSQYB221K50
C 220		CKSQYB221K50
C 221		CKSQYB221K50
C 222		CKSQYB221K50
C 225		CEAL100M16
C 226		CEJA470M10
C 227		CKSQYB104K50
C 301		CKSQYB474K16
C 302		CKSQYB474K16
C 303		CKSQYB474K16
C 304		CKSQYB474K16

=====Circuit Symbol and No.		===Part Name	Part No.
C	305		CEHAS100M16
C	306		CKSYB225K16
C	307		CKSQYB103K50
C	308		CEJA330M10
C	309	4700µF/16V	CCH1362
C	310		CKSQYB104K50
C	311		CKSYB474K16
C	312		CKSYB474K16
C	313		CKSYB474K16
C	314		CKSYB474K16
C	315		CKSQYB225K10
C	401		CKSQYB123K50
C	402		CKSQYB123K50
C	403		CKSQYB103K50
C	404		CKSQYB473K50
C	405		CEJA101M6R3
C	406		CEJA220M10
C	408		CKSQYB223K50
C	409		CKSQYB223K50
C	410		CKSQYB472K50
C	411		CKSQYB103K50
C	412		CKSQYB103K50
C	416		CKSQYB473K50
C	610		CEAL2R2M50
C	611		CKSQYB104K50
C	612		CCSQCH200J50
C	613		CCSQCH200J50
C	614		CKSQYB103K50
C	615		CEAL4R7M35
C	616		CCSQCH101J50
C	619		CCSQCH101J50
C	620		CEJA100M16
C	621		CEJA220M10
C	623		CKSQYB102K50
C	624		CKSQYB105K16
C	641		CKSQYB103K50
C	690		CKSQYB473K50
C	698		CKSQYB473K50
C	701		CEJA220M6R3
C	702		CKSQYB104K50
C	703		CCSQCH270J50
C	704		CCSQCH270J50
C	705		CEJA220M6R3
C	706		CKSQYB104K50
C	707		CKSQYB471K50
C	708		CKSQYB471K50
C	709		CKSQYB104K50
C	710		CKSQYB223K50
C	711		CEAL2R2M50
C	712		CEAL2R2M50
C	713		CKSQYB472K50
C	714		CKSQYB182K50
C	751		CKSQYB104K50
C	752		CKSQYB102K50
C	951	470µF/16V	CCH1183
C	952		CEJA470M10
C	953		CEJA101M10
C	954		CKSQYB103K50
C	955		CKSQYB105K16
C	956		CKSQYB103K50
C	957		CCSQCH101J50
C	958		CEJA101M10

=====Circuit Symbol and No.		===Part Name	Part No.

D Unit Number : CWM6714
: (KEH-P6900R,P6910R)
Unit Name : Keyboard Unit

MISCELLANEOUS

IC	901	IC	PD6279A
IC	902	HIC Module	RS-140
Q	901	Transistor	2SB710A
Q	902	Transistor	DTC114EU
Q	903	Transistor	2SB710A
Q	904	Transistor	DTC114EU
Q	905	Transistor	DTC114EU
Q	906	Transistor	DTC114EU
D	901	Diode	DAN202U
D	902	Diode	DAP202U
D	903	LED	CL170UBX
D	904	LED	CL170UBX
D	907	LED	CL170PGCD(AB)
D	908	LED	CL170DCD
D	909	LED	NSSW440-9159
D	910	LED	NSSW440-9159
D	911	LED	NSSW440-9159
D	912	LED	NSSW440-9159
L	901	Inductor	LCTA101J3225
X	901	Radiator 5.00MHz	CSS1423
S	902	Switch	CSG1113
S	903	Switch	CSG1113
S	904	Spring Switch	CSN1052
S	905	Spring Switch	CSN1051
S	906	Switch	CSG1113
S	907	Switch	CSG1113
S	908	Switch	CSG1113
S	909	Switch	CSG1113
S	910	Switch	CSG1113
S	911	Switch	CSG1113
S	912	Switch	CSG1113
S	913	Switch	CSG1113
S	914	Switch	CSG1113
S	915	Switch	CSG1113
S	916	Switch	CSG1113
S	917	Switch	CSG1113
S	918	Switch	CSG1113
S	919	Switch	CSG1113
S	920	Switch	CSG1113
S	921	Switch	CSG1113
S	922	Switch	CSD1040
LCD	901	LCD	CAW1566

RESISTORS

R	901	RS1/10S222J
R	902	RS1/10S222J
R	903	RS1/10S472J
R	904	RS1/10S121J
R	905	RS1/10S2R2J
R	906	RS1/10S470J
R	907	RS1/10S470J
R	908	RS1/10S472J
R	909	RS1/8S751J
R	910	RS1/8S751J
R	911	RS1/8S561J
R	912	RS1/8S561J
R	913	RS1/8S561J
R	914	RS1/8S561J
R	915	RS1/8S561J

=====Circuit Symbol and No.		===Part Name	Part No.
R	916		RS1/8S561J
R	917		RS1/8S561J
R	918		RS1/8S561J
R	919		RS1/8S561J
R	920		RS1/8S561J
R	921		RS1/8S561J
R	922		RS1/8S561J
R	924		RS1/10S473J
R	925		RS1/10S272J
R	926		RS1/10S473J
R	927		RS1/10S272J
R	931		RS1/8S821J
R	932		RS1/8S821J
R	933		RS1/8S821J
R	934		RS1/8S821J
R	935		RS1/8S152J
R	936		RS1/8S152J
R	937		RS1/8S152J
R	938		RS1/10S431J
R	939		RS1/10S431J

CAPACITORS

C	901		CSZSR100M16
C	902		CKSQYB104K50
C	903		CSZSR100M16
C	904		CKSQYB103K50
C	905		CKSQYB103K50
C	906		CKSQYB103K50
C	907		CKSQYB104K50
C	908		CKSQYB104K50
C	909		CKSQYB104K50
C	910		CKSQYB104K50
C	913		CKSQYB104K50
C	914		CKSQYB104K50

D Unit Number : CWM6715(KEH-P6900R-B)
Unit Name : Keyboard Unit

MISCELLANEOUS

IC	901	IC	PD6279A
IC	902	HIC Module	RS-140
Q	906	Transistor	DTC114EU
D	901	Diode	DAN202U
D	902	Diode	DAP202U
D	903	LED	CL170UBX
D	904	LED	CL170UBX
D	908	LED	CL170SRCD
D	909	LED	NSSW440-9159
D	910	LED	NSSW440-9159
D	911	LED	NSSW440-9159
D	912	LED	NSSW440-9159
L	901	Inductor	LCTA101J3225
X	901	Radiator 5.00MHz	CSS1423
S	902	Switch	CSG1135
S	903	Switch	CSG1135
S	904	Spring Switch	CSN1052
S	905	Spring Switch	CSN1051
S	906	Switch	CSG1135
S	907	Switch	CSG1135
S	908	Switch	CSG1135
S	909	Switch	CSG1135
S	910	Switch	CSG1135
S	911	Switch	CSG1135
S	912	Switch	CSG1135
S	913	Switch	CSG1135
S	914	Switch	CSG1135
S	915	Switch	CSG1135
S	916	Switch	CSG1135
S	917	Switch	CSG1135

=====Circuit Symbol and No.		===Part Name	Part No.
S	918	Switch	CSG1135
S	919	Switch	CSG1135
S	920	Switch	CSG1135
S	921	Switch	CSG1135
S	922	Switch	CSD1040
LCD	901	LCD	CAW1596

RESISTORS

R	901		RS1/10S222J
R	902		RS1/10S222J
R	903		RS1/10S472J
R	904		RS1/10S121J
R	905		RS1/10S2R2J
R	906		RS1/10S470J
R	907		RS1/10S470J
R	909		RS1/8S751J
R	910		RS1/8S751J
R	911		RS1/8S561J
R	912		RS1/8S561J
R	913		RS1/8S561J
R	914		RS1/8S561J
R	915		RS1/8S561J
R	916		RS1/8S561J
R	917		RS1/8S561J
R	918		RS1/8S561J
R	919		RS1/8S561J
R	920		RS1/8S561J
R	921		RS1/8S561J
R	922		RS1/8S561J
R	928		RS1/8S0R0J
R	931		RS1/8S821J
R	932		RS1/8S821J
R	933		RS1/8S821J
R	934		RS1/8S821J
R	935		RS1/8S152J
R	936		RS1/8S152J
R	937		RS1/8S152J
R	938		RS1/10S431J
R	939		RS1/10S431J

CAPACITORS

C	901		CSZSR100M16
C	902		CKSQYB104K50
C	903		CSZSR100M16
C	904		CKSQYB103K50
C	905		CKSQYB103K50
C	906		CKSQYB103K50
C	907		CKSQYB104K50
C	908		CKSQYB104K50
C	909		CKSQYB104K50
C	910		CKSQYB104K50
C	913		CKSQYB104K50
C	914		CKSQYB104K50

C Unit Number : CWM6720
Unit Name : Panel PCB Unit

S	602	Switch(EJECT)	CSG1112

E Unit Number : EWM1024
Unit Name : Deck Unit

MISCELLANEOUS

=====Circuit Symbol and No.		===Part Name	Part No.
IC	251	IC	CXA2560Q
IC	351	IC	PA2020A
D	352	Diode	1SS355
VR	301	Semi-fixed 33kΩ(B)	CCP1280
VR	302	Semi-fixed 33kΩ(B)	CCP1280

RESISTORS

R	255		RS1/16S221J
R	256		RS1/16S221J
R	257		RS1/16S102J
R	258		RS1/16S102J
R	271		RS1/16S102J
R	272		RS1/16S102J
R	273		RS1/16S102J
R	274		RS1/16S102J
R	281		RS1/8S0R0J
R	282		RS1/8S0R0J
R	283		RS1/8S0R0J
R	284		RS1/8S0R0J
R	285		RS1/16S0R0J
R	286		RS1/16S0R0J
R	287		RS1/8S0R0J
R	290		RS1/8S0R0J
R	301		RS1/16S183J
R	322		RS1/16S102J
R	323		RS1/8S0R0J
R	351		RS1/16S102J
R	352		RS1/16S102J
R	353		RS1/16S102J
R	354		RS1/16S102J
R	355		RS1/10S274J
R	362		RS1/8S301J
R	373		RS1/8S0R0J
R	374		RS1/8S0R0J
R	375		RS1/8S0R0J
R	401		RS1/16S472J
R	402		RS1/16S183J
R	403		RS1/16S823J

CAPACITORS

C	251		CKSRYB331K50
C	252		CKSRYB331K50
C	253		CKSRYB331K50
C	254		CKSRYB331K50
C	255		CKSRYB103K50
C	256		CKSRYB103K50
C	272		CKSRYB104K16
C	273		CEJA220M16
C	301		CKSRYB104K16
C	302		CKSRYB104K16
C	309		CKSRYB104K16
C	310		CKSRYB104K16
C	313		CCSRCH101J50
C	351		CKSYB224K25
C	352		CKSRYB392K50
C	353		CKSRYB103K50
C	354		CKSRYB103K50
C	355		CKSYB104K50
C	356		CKSRYB103K50
C	401		CKSQYB334K16
C	402		CKSRYB392K50
C	403		CKSRYB683K16

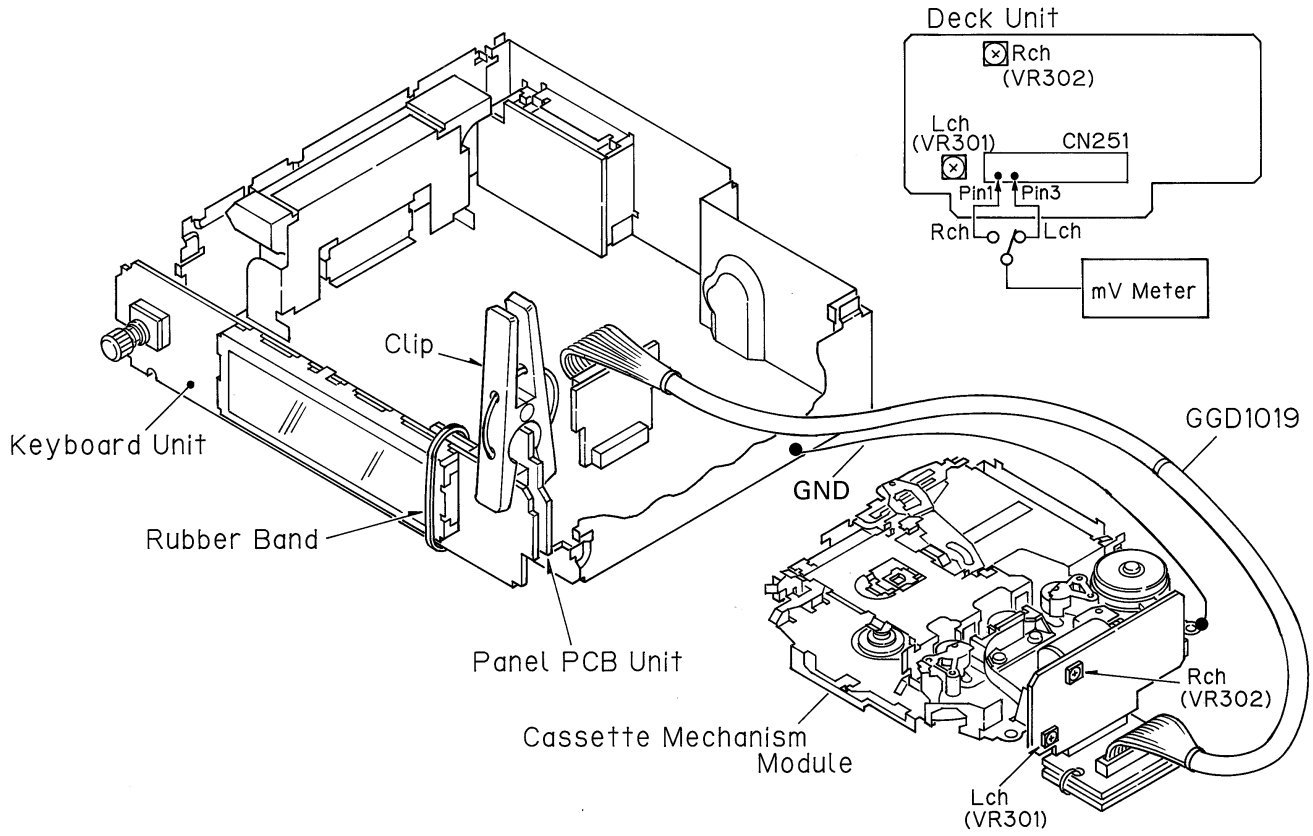
F Unit Number :
Unit Name : REEL SENSE PCB

=====Circuit Symbol and No.		===Part Name	Part No.
S	1	Switch(LOAD)	ESG1007
S	2	Switch(MODE)	ESG1007
S	3	Switch(70µs)	ESG1007
EGN	1	Photo-reflector	EGN1004

Miscellaneous Parts List

M	1	Motor Unit(MAIN)	EXA1490
M	2	Motor Unit(SUB)	EXA1580
HD	1	Head Assy	EXA1589

6. ADJUSTMENT



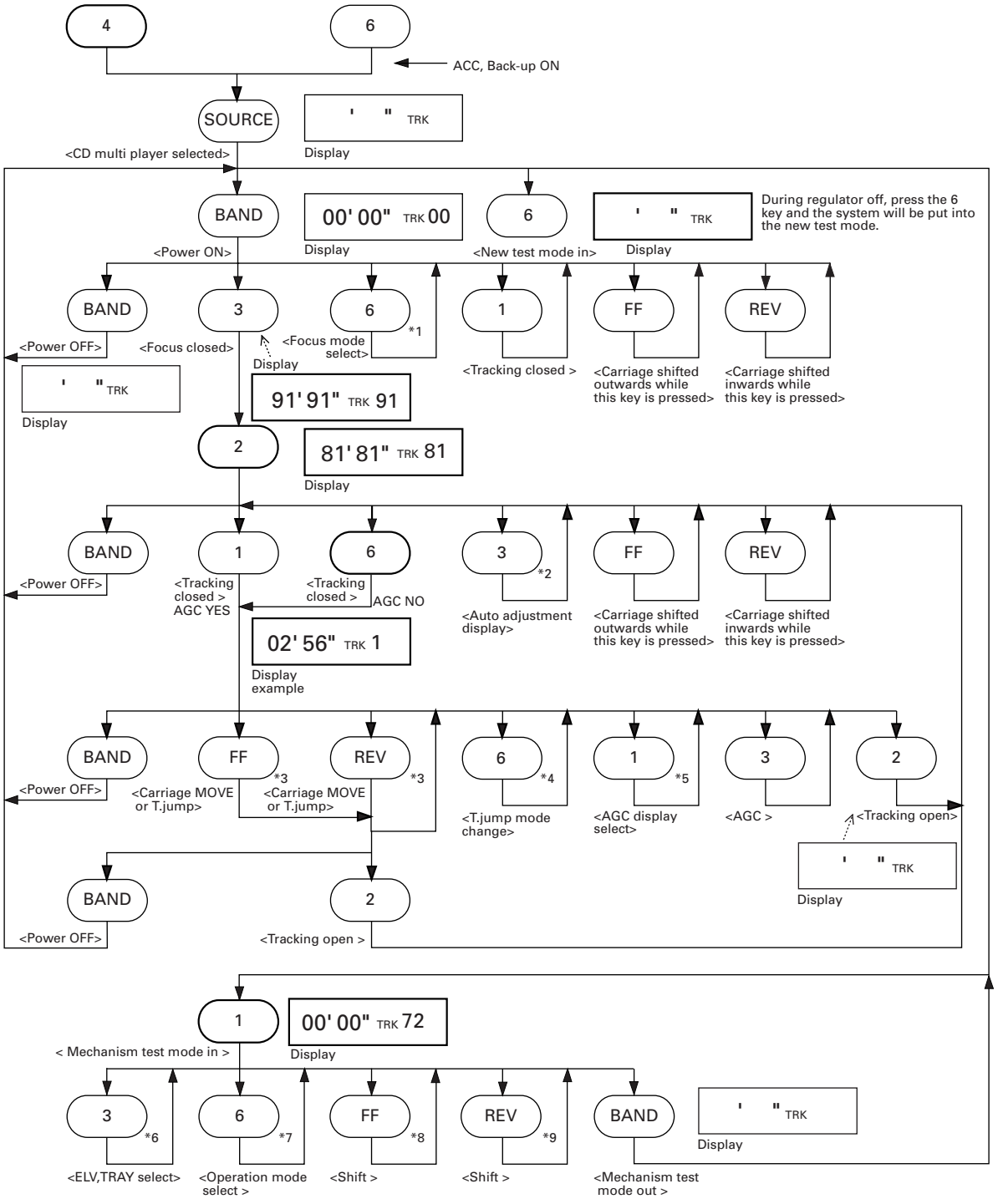
DOLBY B NR ADJUSTMENT

No.	Test Tape	Adjustment Point	Adjustment Method (Switch Position)
1	NCT-150 (400Hz,200nwb/m)	VR301(Lch),VR302(Rch)	mV Meter(2) : –6dBm(388mV)±1dB (DOLBY NR Switch : OFF)

7. GENERAL INFORMATION

7.1 DIAGNOSIS

7.1.1 TEST MODE



*1 Normal focus close → S curve check → Focus EQ check
00 00' 00" Display 01 01' 01" 02 02' 02"

*2 Normal display → Focus cancel → Tracking offset → Tracking balance (Close spindle-rough)

*3 100 TRK jump and carriage MOVE continue only while the keys are released

*4 SINGLE → 4TRK → 10TRK → 32TRK → 100TRK → C.MOVE
81 Display 82 83 84 85 86

*5 Normal display → Focus gain → Tracking gain → Focus bias

*6 ELV motor select → TRAY motor select
72 00' 0X" Display 72 10' 0X"

*7 8ms pulse drive → 24ms pulse drive → DC drive
72 00' 00" Display 72 00' 01" 72 00' 02"

48ms pulse drive → 100ms pulse drive → DC drive
72 10' 00" Display 72 10' 01" 72 10' 02"

*8 ELV select : ELV dowm (Disc 1→6)
TRAY select : TRAY out

*9 ELV select : ELV up (Disc 6→1)
TRAY select : TRAY in

● New Test Mode(aging operation and setup analysis)

The single CD player plays in normal mode. After being set up, it will display FOK (focus), LOCK (spindle), subcode, sound skip, protection against a mechanical error or the like, occurrence of an error, cause and time of an expiry, if any, (and disc number)

During the setup, the CD software operation status (internal RAM and C-point)is displayed.

(1) How to enter NEW TEST Mode

See the test mode flow chart Page 66.

(2) Relations of keys between TEST and NEW TEST Modes

Keys	Test Mode		New Test Mode	
	Regulator OFF	Regulator ON	PLAY in progress	Error Occurred, Protection Activated
BAND	Regulator ON	Regulator OFF	—	Time of occurrence/ cause of error select
FF	—	FWD-Kick	FF/TRACK+	—
REV	—	REV-Kick	REV/TRACK-	—
1	—	Tracking close	SCAN	—
2	—	Tracking open	MODE	—
3	—	Focus close	—	—
6	To New Test Mode	Jump Mode Select	AUTO/MANU	TRACK No./ time of occurrence select

Operations,such as EJECT, CD ON/OFF, etc. are performed normally

(3) Error Cause (Error Number) Code

Error Code	Classification	Mode	Description	Cause/Detail	
40	ELECTRIC	PLAY	FOK=L 100ms	Put out of focus	Scratch, Stain, Vibration, Servo defect, etc...
41	ELECTRIC	PLAY	LOCK=L 100ms	Spindle unlock	
42	ELECTRIC	PLAY	Subcode unacceptable 500ms	Failed to read subcode	
43	ELECTRIC	PLAY	Sound skipped	Last address memory operated	

(4) Indicating an Operation Status During Setup

Status No.	Description	Protection operation
01	Carriage home mode started	None
02	Carriage moving inwards	10-second time out, Home switch failed
03	Carriage moving outwards	10-second time out, Home switch failed
05	Carriage moving outwards	None
11	Setup started	None
12	Spindle turn/Focus search started	None
13	Waiting for focus closure (XSI=L)	Failure to close focus
10,14	Waiting for focus closure (FOK=H)	Failure to close focus
15, 16, 17	Focus closed, Tracking open	Focus disrupted
18	During focus AGC	Focus disrupted
19	During tracking AGC	Disrupted focus
20	Waiting for MIRR, LOCK or subcode read Carriage closed, SPINDLE=ADAPTIVE	Focus disrupted, MIRR NG, Failure to lock, failed to read subcode

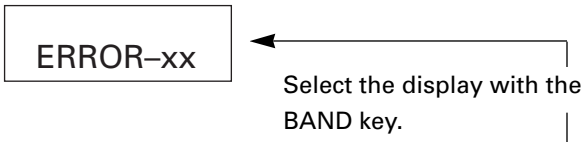
(5) Example of Display.

•SET UP in progress
8 digits display LCD

•Operation (PLAY, SEARCH, etc.) in progress perfectly identical with that in the normal mode.

•Protection/Error upon occurrence(8 digits display LCD)

(a) Error number indicated



(b) Track number and
absolute time indicated

● Error Number Indication

If the CD should fail to operate or if an error has taken place during operation the player will enter into the error mode, and the cause of the error will be numerically indicated.
This is aimed at assisting in analysis or repair.

(1) Basic Means of Display

• Examples of Display ERROR-xx

(2) Error Codes

Error Code	Classification	Description	Cause/Detail
10	ELECTRIC	Carriage home failure	Carriage doesn't move to or from the innermost position →Home switch failed and/or carriage immobile
11	ELECTRIC	Focus failure	Focus failed →Defects, disc upside-down, severe vibration
12	ELECTRIC	SETUP failure Subcode failure	Spindle failed to lock or subcode unreadable →Spindle defective, defect, severe vibration
14	ELECTRIC	Mirror failure	Unrecorded CD-R The disc is upside-down, defects, vibration
17	ELECTRIC	Set up failure	AGC protect failed →Defects, disc upside-down, severe vibration
19	ELECTRIC	Set up failure	Tracking error waveform is too unbalanced (>50%) or level is too small →The pickup unit or tracking error circuitry is N.G.
30	ELECTRIC	Search time out	Failed to reach target address →Carriage/tracking defective and/or defects
A0	SYSTEM	Power failure	Power overvoltage or short circuit detected →Switching transistor defective and/or power abnormal
A1	SYSTEM	Mechanism power failure	Mechanism elevation reference voltage is out of prescription →EREF adjustment VR and/or power abnormal
50	MECHANISM	An error upon ejection	MAG switch release time has time out Elevation time out when eject
60	MECHANISM	An error while putting in and out the tray	Tray in / out time has time out Tray is caught when put in
70	MECHANISM	An error upon elevation	Elevation time has time out
80	MECHANISM	An error with an empty magazine inserted	No disc is available

* Setup means a series of operations after focusing up to sound output.

7.1.2 DISASSEMBLY

● **Remove the Case(not shown)**

1. Remove the two screws.
2. Remove the Case.

● **Remove the Cassette Mechanism Module (not shown)**

1. Remove the four screws.
2. Disconnect the connector, and then remove the Cassette Mechanism Module.

● **Remove the Panel Unit(Fig.1)**

1 Remove the two screws.

2 Disengage the stopper at two locations indicated by arrow.

3 Remove the Panel Unit.

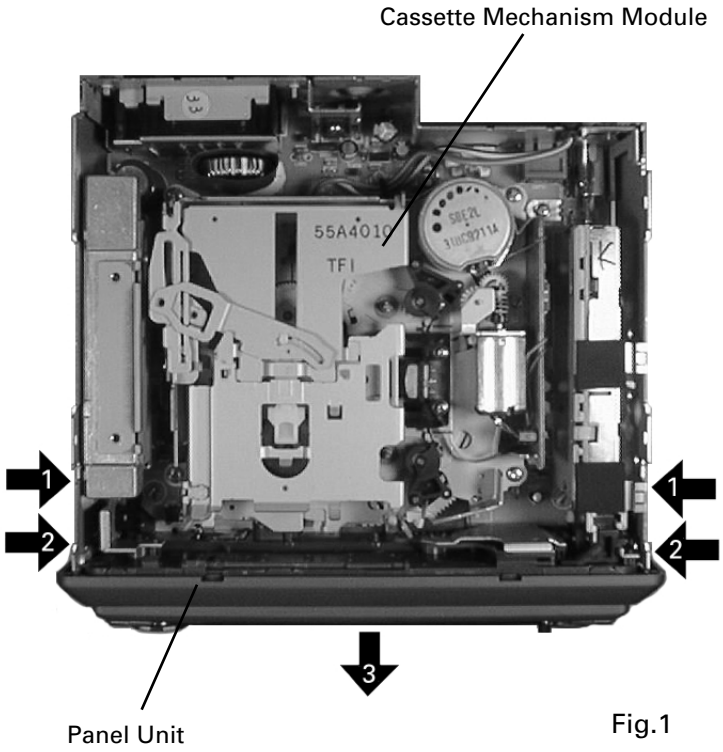


Fig.1

● **Remove the Tuner Amp Unit(Fig.2)**

1 Remove the two screws.

2 Remove the three screws.

3 Remove the screw.

4 Disconnect the connector.
(KEH-P6900R,P6900R-B)

5 Unbend the tabs at two locations indicated by arrow until straight.
Remove the Tuner Amp Unit.

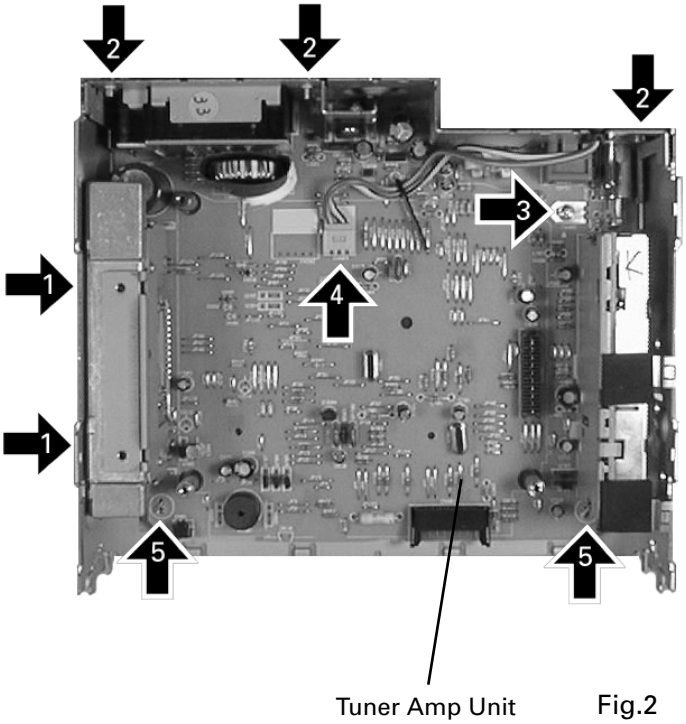


Fig.2

7.2 PARTS

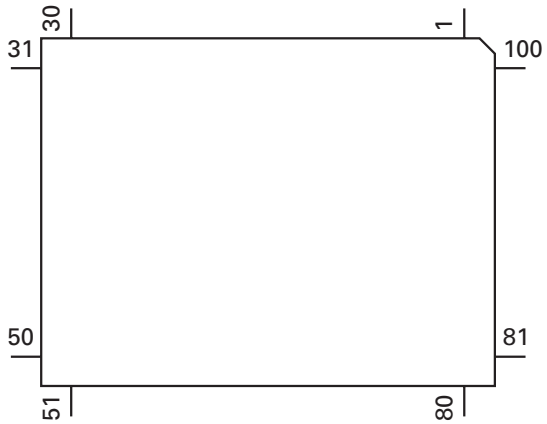
7.2.1 IC

● **Pin Functions (PE5083A)**

Pin No.	Pin Name	I/O	Function and Operation
1	$\overline{\text{FM}}$/AM	O	RDS decoder power select output
2	NC		Not used
3	$\overline{\text{CSENS}}$	I	Flap close sense input
4	NC		Not used
5	TESTIN	I	Test program mode input
6	NC		Not used
7	$\overline{\text{DRST}}$	O	Reset output
8	NL2DT	I	RDS:Noise lebel input
9	KEYIN2	I	Encoder input 2
10	KEYIN1	I	Encoder input 1
11	$\overline{\text{RESET}}$	I	Reset input
12	XT2		Clock terminal(Open)
13	XT1		Clock terminal(VSS)
14	VSS		GND
15	X2		Crystal oscillator connection pin
16	X1		Crystal oscillator connection pin
17	REGOFF		VDD
18	REGC		VDD
19	VDD		Power supply
20	NC		Not used
21	$\overline{\text{ADPW}}$	O	A/D converter power
22	SDBW	O	SDBW inout
23	$\overline{\text{RDSLK}}$	I	RDS LK signal input
24	RDT	I	RDS demodulation data input
25	ILMPW	O	Illumination power supply control output
26	LCDPW	O	LCD back light power supply control output
27	$\overline{\text{ISENS}}$	I	Illumination sense input
28	ROMDATA	O	ROM correction data output
29	ROMCLK	O	ROM correction clock output
30	ROMCS	O	ROM correction chip select output
31	SD	I	SD input
32	$\overline{\text{ST}}$	I	FM stereo input
33	$\overline{\text{MUTE}}$	O	Mute output
34	VST	O	Strobe pulse output for electronic volume
35	VDT	O	Data output for electronic volume
36	VCK	O	Clock output for electronic volume
37	$\overline{\text{DLED}}$	O	Alarm LED output
38	DRSENS	I	Door open/close sense input
39	DRSYS	O	Door system select output
40	VSS		GND
41	VDD		Power supply
42	TELIN	I	Telephone mute input
43	DRELAY	O	External relay output
44	$\overline{\text{DSENS}}$	I	Grille detach sense
45	$\overline{\text{TMUTE}}$	O	Tuner mute output
46	$\overline{\text{SWVDD}}$	O	Grille power supply control output
47	ASENBO	O	Slave power supply control output
48	IPPW	O	Power supply control output for IP BUS interface IC
49	LOCL	O	LOC L output
50	LOCH	O	LOC H output
51	SYSPWR	O	System power control
52	$\overline{\text{TUNPCE2}}$	O	EEPROM chip enable
53	DALMON	O	Power save control
54	$\overline{\text{CURRQ}}$	O	Tuner voltage FIX output
55	$\overline{\text{STBY}}$	O	Drive IC control output

Pin No.	Pin Name	I/O	Function and Operation
56	CM	O	Cassette mechanism capstan motor control output
57	SC1	O	Cassette mechanism sub motor control output
58	SC2	O	Cassette mechanism sub motor control output
59	NES	I	Cassette mechanism forward end sense input
60	RES	I	Cassette mechanism reverse end sense input
61	POS	I	Cassette mechanism position sense input
62	PCL	O	Clock adjustment output
63	NR	O	Dolby NR ON/OFF select output
64	$\overline{\text{MTLSW}}$	I	Metal sense input
65	RIMUTE	O	RI mute output
66	PLAY	O	MS gain select output
67	DIRO	O	Head F/R select output
68	MSIN	I	Cassette mechanism MS sense input
69	$\overline{\text{LOADSW}}$	I	Tape loading input
70	RECIVE	O	During RDS data reception output
71,72	NC		Not used
73	TEST	I	Test terminal
74	SEL	I	Select input for the destination
75	SL	I	SD level input from tuner
76	NC	O	Open
77	CL	I	Not used
78	NL	I	Noise level input
79	FLPILM	O	Inside of flap illumination output
80	EJECTS	I	EJECT input
81	NC		Not used
82,83	VDD		Power supply
84	GND		GND
85	RX	I	IP BUS data input
86	TX	O	IP BUS data output
87	GND		GND
88	$\overline{\text{LDET}}$	I	PLL lock sense input
89	$\overline{\text{RCK}}$	I	RDS demodulation clock input
90	RDS57K	I	57kHzBP-OUT sense input
91	NC		Not used
92	$\overline{\text{BSENS}}$	I	Back up power sense input
93	$\overline{\text{ASENS}}$	I	ACC power sense input
94	TUNPDI	I	PLL IC data input
95	KEYDT	I	Display data input
96	DPDT	O	Display data output
97	TUNPCK	O	PLL IC clock
98	TUNPDO	O	PLL IC data output
99	TUNPCE	O	PLL IC chip enable
100	PEE	O	Beep tone output

*PE5083A

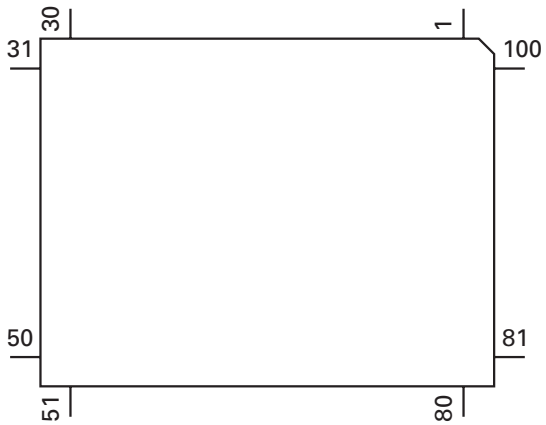


IC's marked by* are MOS type.
Be careful in handling them because they are very liable to be damaged by electrostatic induction.

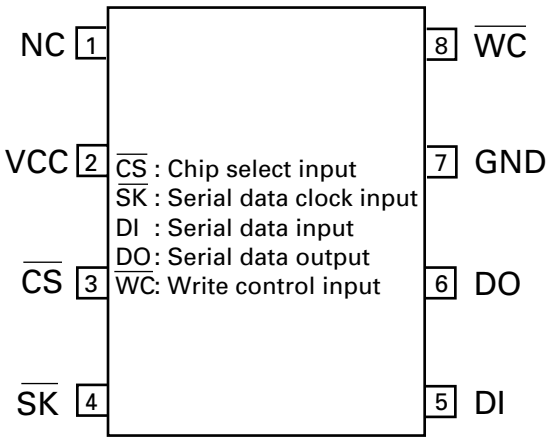
● **Pin Functions (PD6279A)**

Pin No.	Pin Name	I/O	Function and Operation
1-42	SEG41-0	O	LCD segment output
43-46	COM3-0	O	LCD common output
47-49	V1-3	I	LCD bias power supply
50	VCC		Power supply
51	LED		Open
52	SO	O	Serial data output
53	SI	I	Serial data input
54	MODE0		Connect to GND
55	MODE1		Connect to GND
56	$\overline{RST}$	I	Reset
57	X0		Crystal oscillator connection pin
58	X1		Crystal oscillator connection pin
59	VSS		GND
60	REMIN	I	Remote control reception
61	$\overline{DIM}$	O	Dimmer select output
62	GRN/$\overline{AMB}$	O	Green/Amber select output
63-66	KDT4-1	I	Key data input (analogue input)
67-72	KST6-1	O	Key strobe output
73-82	NC		Not used
83-100	SEG59-42	O	LCD segment output

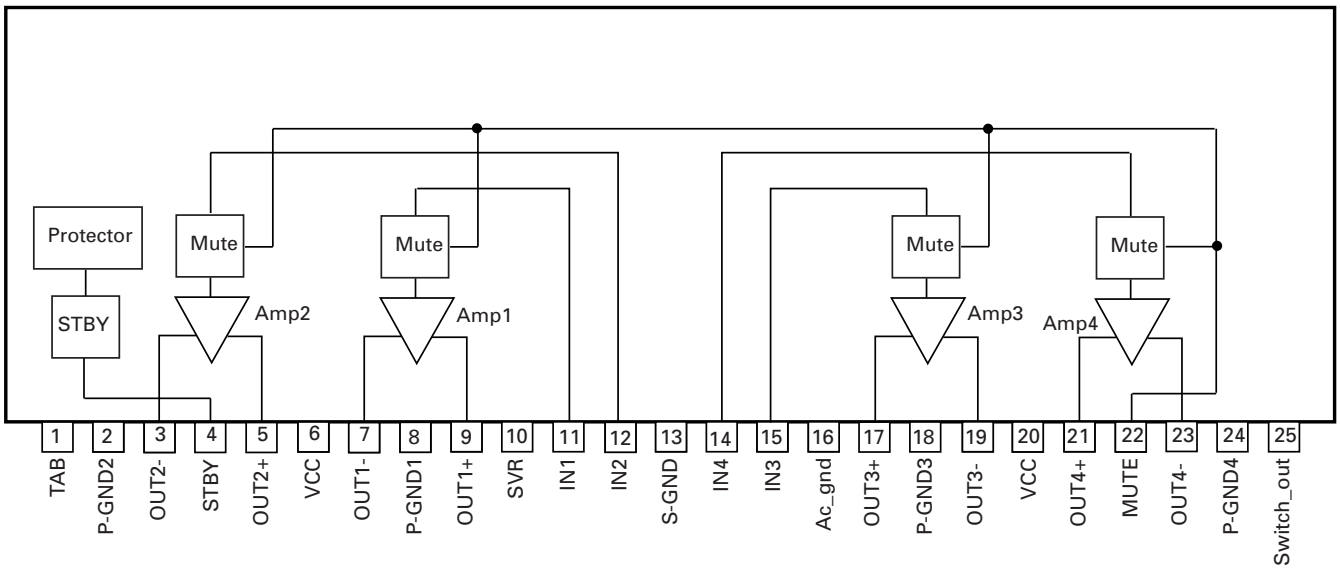
*PD6279A



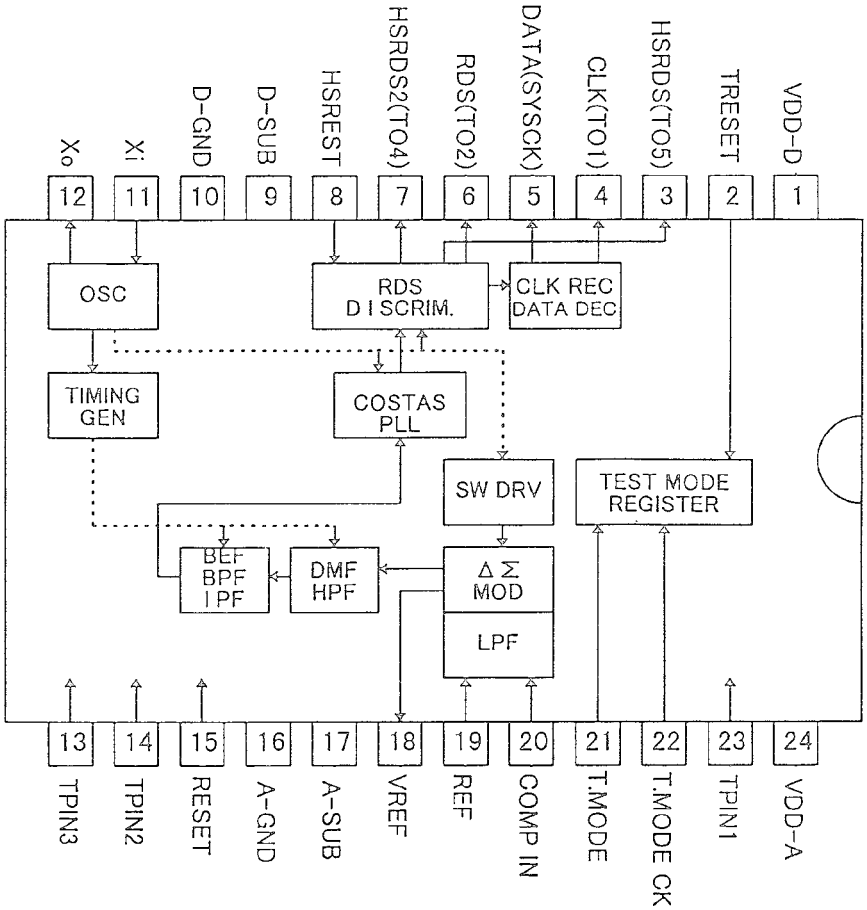
BR9010FV



PAL005A

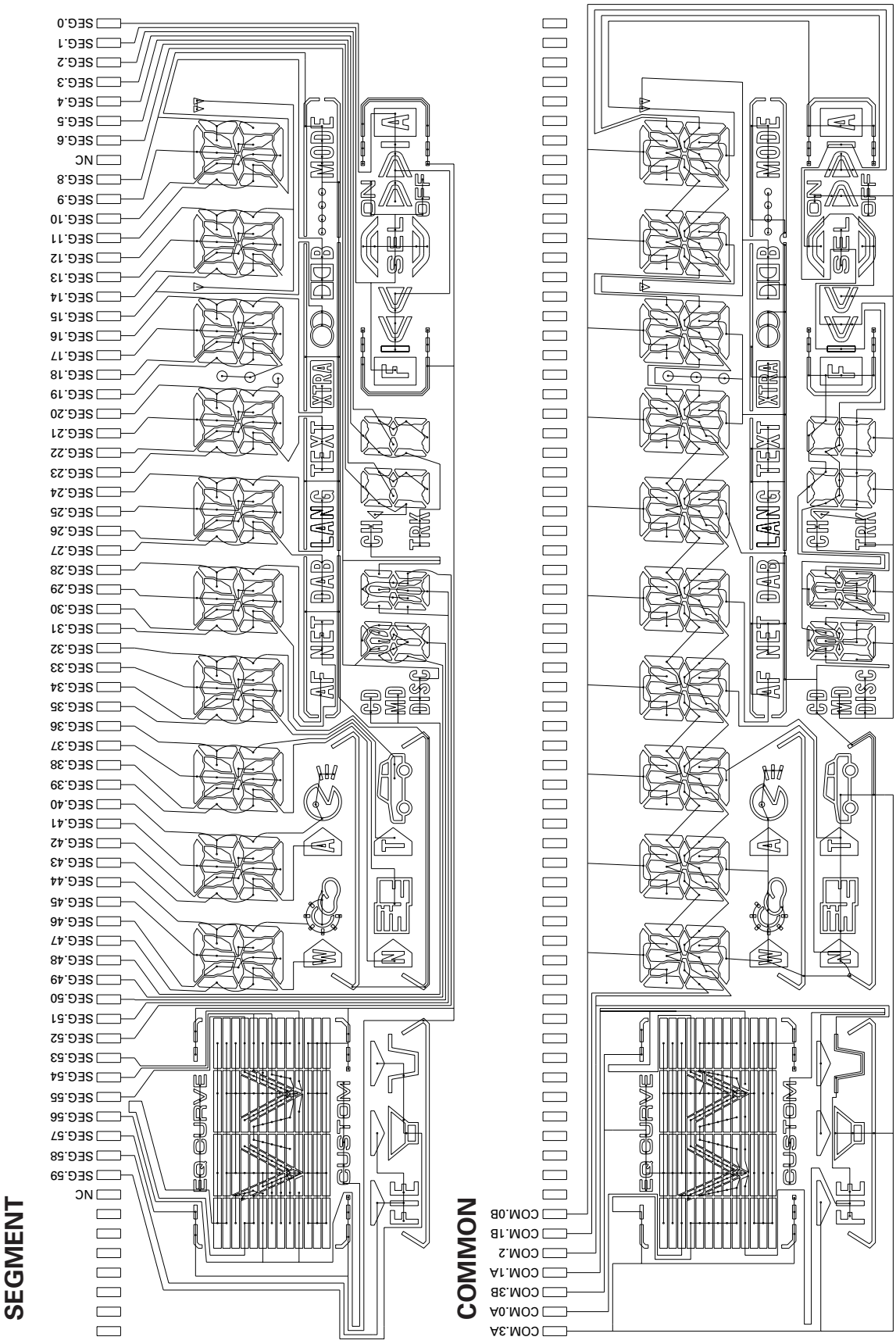


PM4009A



7.2.2 DISPLAY

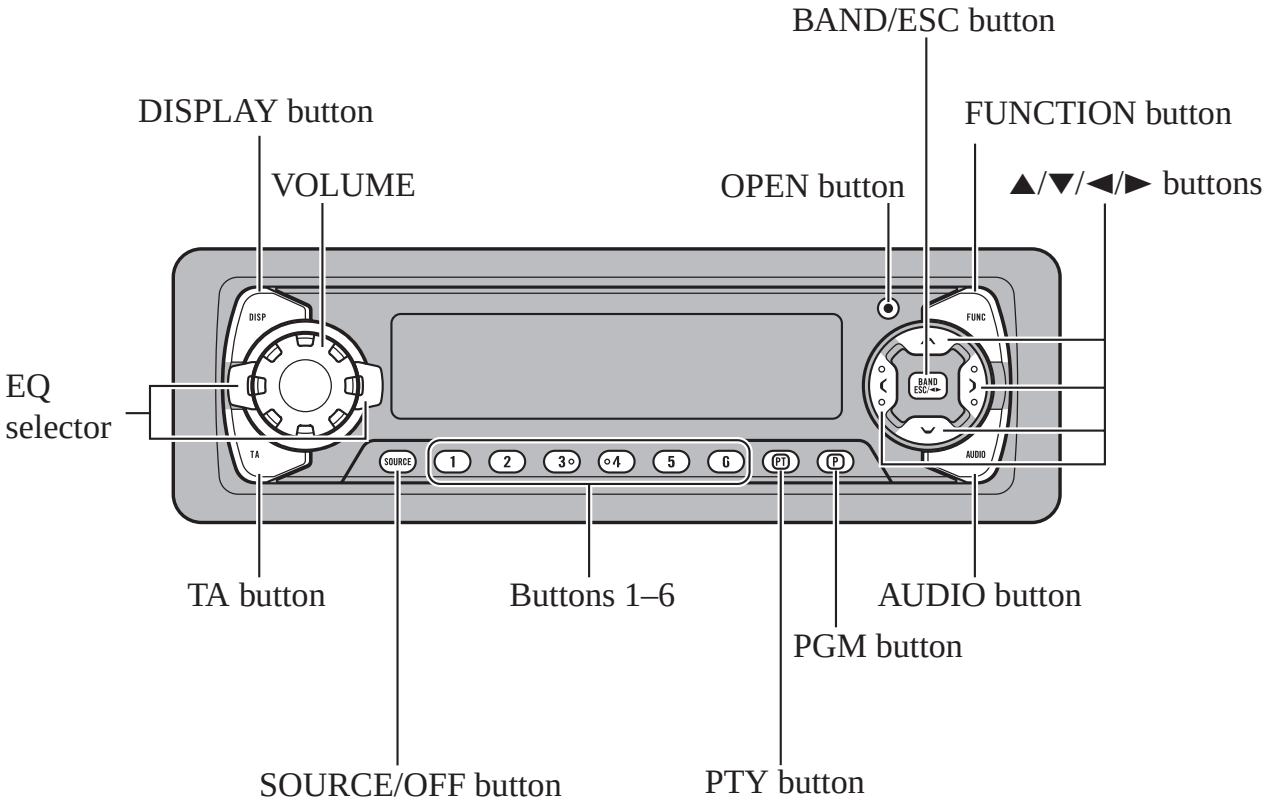
● **CAW1566(KEH-P6900R),CAW1596(KEH-P6900R-B,P6910R)**



8. OPERATIONS AND SPECIFICATIONS

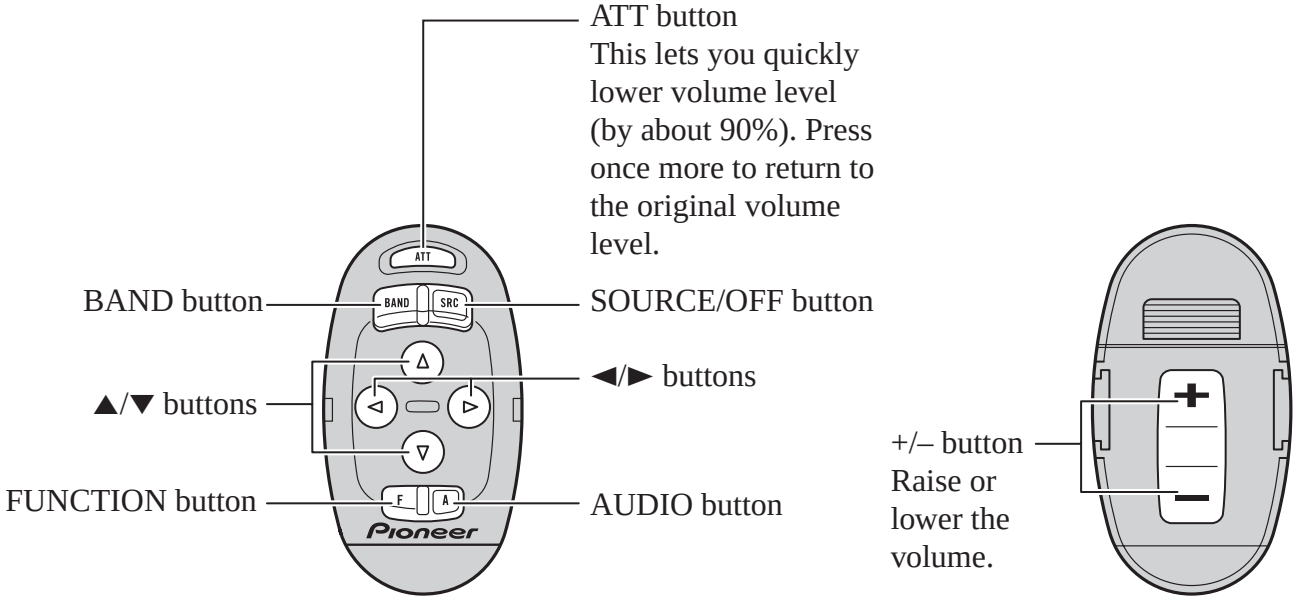
8.1 OPERATIONS(KEH-P6900R)

Head Unit



Steering Remote Controller (CD-SR77)

The steering remote controller (CD-SR77) enabling remote control of the head unit is sold separately. Operation is the same as when using buttons on the head unit.


ATT button
This lets you quickly lower volume level (by about 90%). Press once more to return to the original volume level.
BAND button
SOURCE/OFF button
◄/► buttons
▲/▼ buttons
FUNCTION button
AUDIO button
+/– button
Raise or lower the volume.

To Listen to Music

The following explains the initial operations required before you can listen to music.

Note:
- Loading a cassette in this product.

1. Select the desired source. (e.g. Tuner)

Each press changes the Source ...

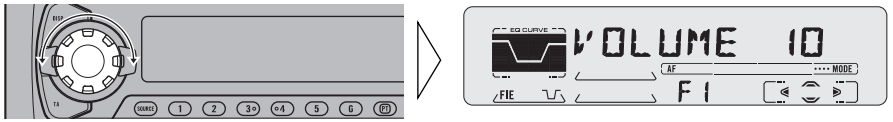
Each press of the SOURCE/OFF button selects the desired source in the following order:
Tuner → Tape → Multi-CD player → External Unit → AUX

Note:
- External Unit refers to a Pioneer product (such as one available in the future) that, although incompatible as a source, enables control of basic functions by this product. Only one External Unit can be controlled by this product.
- In the following cases, the sound source will not change:
  * When a product corresponding to each source is not connected to this product.
  * When no tape is set in this product.
  * When no magazine is set in the Multi-CD player.
  * When the AUX (external input) is set to OFF.
- When this product's blue/white lead is connected to the car's Auto-antenna relay control terminal, the car's Auto-antenna extends when this product's source is switched ON. To retract the antenna, switch the source OFF.

2. Extend the VOLUME forward.

When you press the VOLUME, it extends forward so that it becomes easier to roll. To retract the VOLUME, press it again.

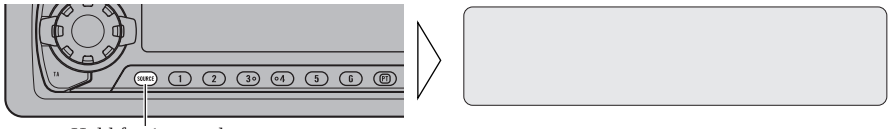
3. Raise or lower the volume.



Rolling the VOLUME changes the volume level.

Note:
- Roll clockwise to raise the volume level.
- Roll counterclockwise to lower the volume level.

4. Turn the source OFF.



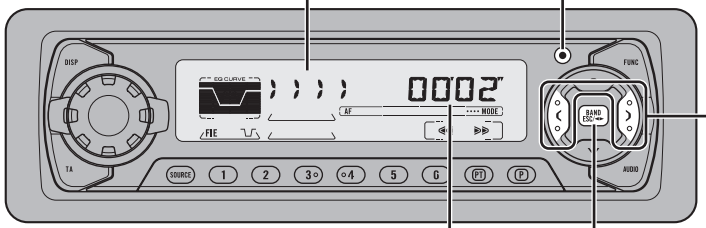
Hold for 1 second

Basic Operation of Cassette Player

Note:
- Be sure to close the front panel after loading or ejecting a cassette.

Open

Note:
- Use to open the front panel when loading or ejecting a cassette. (The illustration on the right shows the front panel open.)



Note:
- The continuous playback time count starts at 00'00" at the following times.
  * When a tape is inserted.
  * When the tape direction is changed.
  * When you rewind the tape side currently playing back to the beginning.
- The continuous playback time count is halted when fast-forwarding/rewinding and while the Music Search function is operating.

Fast Forward/Rewind and Music Search

- **Each press of the ► button selects Fast Forward or Forward-Music Search.**

  FF (Fast Forward) → F-MS (Forward-Music Search) → Normal Playback

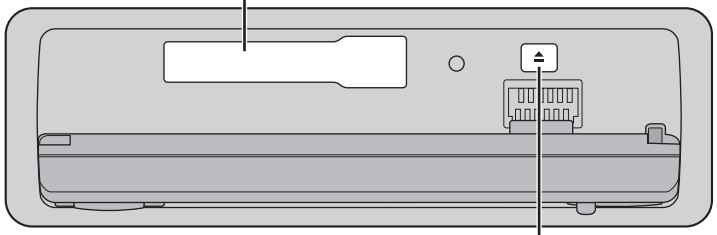
- **Each press of the ◄ button selects Rewind or Rewind-Music Search.**

  REW (Rewind) → R-MS (Rewind-Music Search) → Normal Playback

Note:
- Fast Forward/Rewind and Music Search can be canceled by pressing the BAND button.

Cassette Loading Slot

Note:
- "METAL" appears on the display for 4 seconds when a metal or chrome tape is inserted. Nothing is displayed for a normal tape.



Note:
- The Tape function can be turned ON/OFF with the cassette tape remaining in this product.

Basic Operation of Tuner

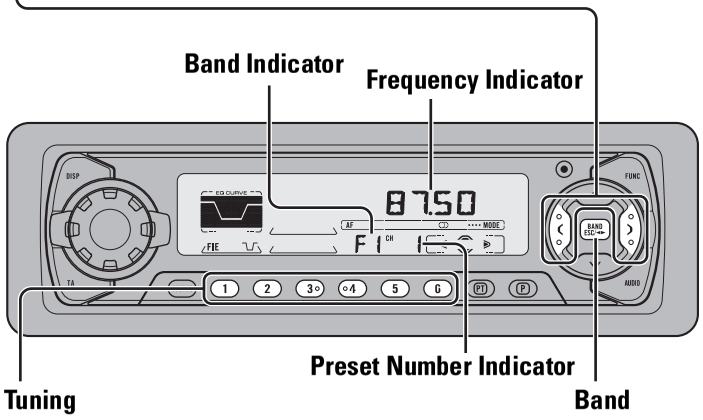
This product's AF function can be switched ON and OFF. AF should be switched OFF for normal tuning operations.

Manual and Seek Tuning

- **You can select the tuning method by changing the length of time you press the ◄/► button.**

Manual Tuning (step by step)	0.5 seconds or less
Seek Tuning	0.5 seconds or more

Note:
- If you continue pressing the button for longer than 0.5 seconds, you can skip broadcasting stations. Seek Tuning starts as soon as you release the button.
- Stereo indicator "◯◯" lights when a stereo station is selected.



- **You can memorize broadcast stations in buttons 1 through 6 for easy, one-touch station recall.**

Preset station recall	2 seconds or less
Broadcast station preset memory	2 seconds or more

Note:
- Up to 18 FM stations (6 in F1 (FM1), F2 (FM2) and F3 (FM3)) and 6 MW/LW stations can be stored in memory.
- You can also use the ▲ or ▼ buttons to recall broadcast stations memorized in buttons 1 through 6.

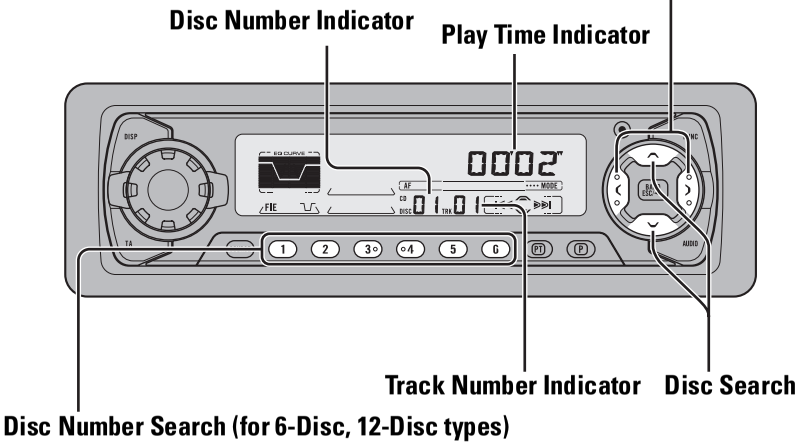
Basic Operation of Multi-CD Player

This product can control a Multi-CD player (sold separately).

Track Search and Fast Forward/Reverse

- **You can select between Track Search or Fast Forward/Reverse by pressing the ◄/► button for a different length of time.**

Track Search	0.5 seconds or less
Fast Forward/Reverse	Continue pressing

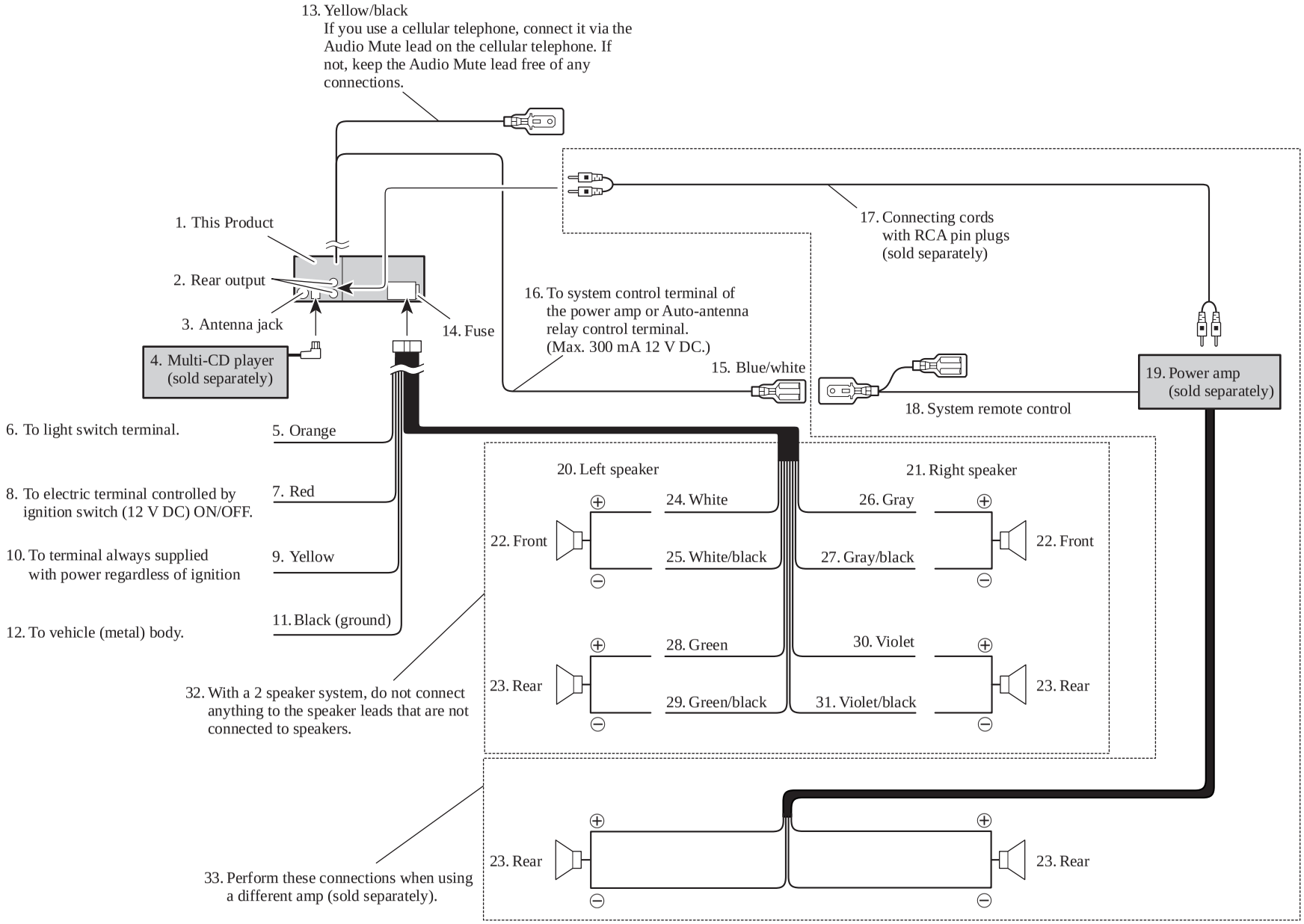


- **You can select discs directly with the 1 to 6 buttons. Just press the number corresponding to the disc you want to listen to.**

Note:
- When a 12-Disc Multi-CD Player is connected and you want to select disc 7 to 12, press the 1 to 6 buttons for 2 seconds or longer.

Note:
- The Multi-CD player may perform a preparatory operation, such as verifying the presence of a disc or reading disc information, when the power is turned ON or a new disc is selected for playback. "READY" is displayed.
- If the Multi-CD player cannot operate properly, an error message such as "ERROR-14" is displayed. Refer to the Multi-CD player owner's manual.
- If there are no discs in the Multi-CD player magazine, "NO DISC" is displayed.

Connecting the Units


13. Yellow/black
If you use a cellular telephone, connect it via the Audio Mute lead on the cellular telephone. If not, keep the Audio Mute lead free of any connections.
1. This Product
2. Rear output
3. Antenna jack
4. Multi-CD player (sold separately)
14. Fuse
17. Connecting cords with RCA pin plugs (sold separately)
16. To system control terminal of the power amp or Auto-antenna relay control terminal. (Max. 300 mA 12 V DC.)
15. Blue/white
18. System remote control
19. Power amp (sold separately)
6. To light switch terminal.
5. Orange
8. To electric terminal controlled by ignition switch (12 V DC) ON/OFF.
7. Red
10. To terminal always supplied with power regardless of ignition
9. Yellow
12. To vehicle (metal) body.
11. Black (ground)
20. Left speaker
21. Right speaker
22. Front
24. White
25. White/black
26. Gray
27. Gray/black
22. Front
23. Rear
28. Green
29. Green/black
30. Violet
31. Violet/black
23. Rear
32. With a 2 speaker system, do not connect anything to the speaker leads that are not connected to speakers.
33. Perform these connections when using a different amp (sold separately).
23. Rear
23. Rear

8.2 SPECIFICATIONS

General

Power source ..... 14.4 V DC (10.8 – 15.1 V allowable)
Grounding system ..... Negative type
Max. current consumption ..... 10.0 A
Dimensions
(mounting size) ..... 178 (W) × 50 (H) × 155 (D) mm
(front face) ..... 188 (W) × 58 (H) × 19 (D) mm
Weight ..... 1.3 kg

Amplifier

Maximum power output ..... 45 W × 4
Continuous power output ..... 27 W × 4
(DIN45324, +B = 14.4 V)
Load impedance ..... 4 Ω (4 – 8 Ω allowable)
Preout maximum output level/output
impedance ..... 2.2 V/1 kΩ
Equalizer (3-Band Parametric Equalizer)
(Low) ..... Frequency: 40/80/100/160 Hz
Q Factor: 0.35/0.59/0.95/1.15
(+6 dB when boosted)
Level: ±12 dB
(Mid) ..... Frequency: 200/500/1k/2k Hz
Q Factor: 0.35/0.59/0.95/1.15
(+6 dB when boosted)
Level: ±12 dB
(High) ..... Frequency: 3.15k/8k/10k/12.5k Hz
Q Factor: 0.35/0.59/0.95/1.15
(+6 dB when boosted)
Level: ±12 dB
Loudness contour
(Low) ..... +3,5 dB (100 Hz), +3 dB (10 kHz)
(Mid) ..... +10 dB (100 Hz), +6,5 dB (10 kHz)
(High) ..... +11 dB (100 Hz), +11 dB (10 kHz)
(volume: –30 dB)

Cassette player

Tape ..... Compact cassette tape (C-30 – C-90)
Tape speed ..... 4.76 cm/sec. (+0.14cm/sec.,-0.05cm/sec.)
Fast forward/rewinding time .... Approx. 100 sec. for C-60
Wow & flutter ..... 0.09% (WRMS)
Frequency response ..... Metal: 30 – 19,000 Hz (±3 dB)
Stereo separation ..... 45 dB
Signal-to-noise ratio
..... Metal: Dolby B NR IN: 67 dB (IEC-A network)
Dolby NR OUT: 61 dB (IEC-A network)

FM tuner(KEH-P6900R,P6900R-B)

Frequency range ..... 87.5 – 108 MHz
Usable sensitivity..... 11 dBf
(1.0 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity ..... 16 dBf
(1.7 µV/75 Ω, mono)
Signal-to-noise ratio ..... 70 dB (IEC-A network)
Distortion ..... 0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response ..... 30 – 15,000 Hz (±3 dB)
Stereo separation ..... 40 dB (at 65 dBf, 1 kHz)

FM tuner(KEH-P6910R)

Frequency range ..... 65 – 74 MHz
87.5 – 108 MHz
Usable sensitivity .....11 dBf
(1.0 µV/75 Ω, mono, S/N: 30 dB)
50 dB quieting sensitivity ..... 16 dBf
(1.7 µV/75 Ω, mono)
Signal-to-noise ratio ..... 70 dB (IEC-A network)
Distortion ..... 0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response ..... 30 – 15,000 Hz (±3 dB)
Stereo separation ..... 40 dB (at 65 dBf, 1 kHz)

MW tuner

Frequency range ..... 531 – 1,602 kHz (9 kHz)
Usable sensitivity ..... 18 µV (S/N: 20 dB)
Selectivity ..... 50 dB (±9 kHz)

LW tuner

Frequency range ..... 153 – 281 kHz
Usable sensitivity ..... 30 µV (S/N: 20 dB)
Selectivity ..... 50 dB (±9 kHz)

Note:

- Specifications and the design are subject to possible modification without notice due to improvements.